SUZUKI

SERVICE MANUAL

LJ10

FOREWORD

The "Suzuki LJ10" is a completely new multi-purpose car skillfully designed and built by our company who is widely known as a pioneer of mini-vehicles in the world.
The "Suzuki LJ10" is ideally suited for operation under all weather and road conditions. In order to obtain a high performance and many other features built into the Suzuki LJ10, regular inspection and maintenance are of vital importance.
This manual is designed to assist the servicemen in the efficient servicing of the "Suzuki LJ10" and includes important information pertaining to the construction, inspection and service procedures of the engine, transmission, transfer case, suspension, etc. with reference made to the model L40 service manual.
It is hoped that this manual will be used as a handy reference to ensure that every Suzuki LJ10 receives correct service attention.

March 1971

SUZUKI MOTOR CO.,LTD.

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CHAPTER 1. GENERAL

1–1. External view

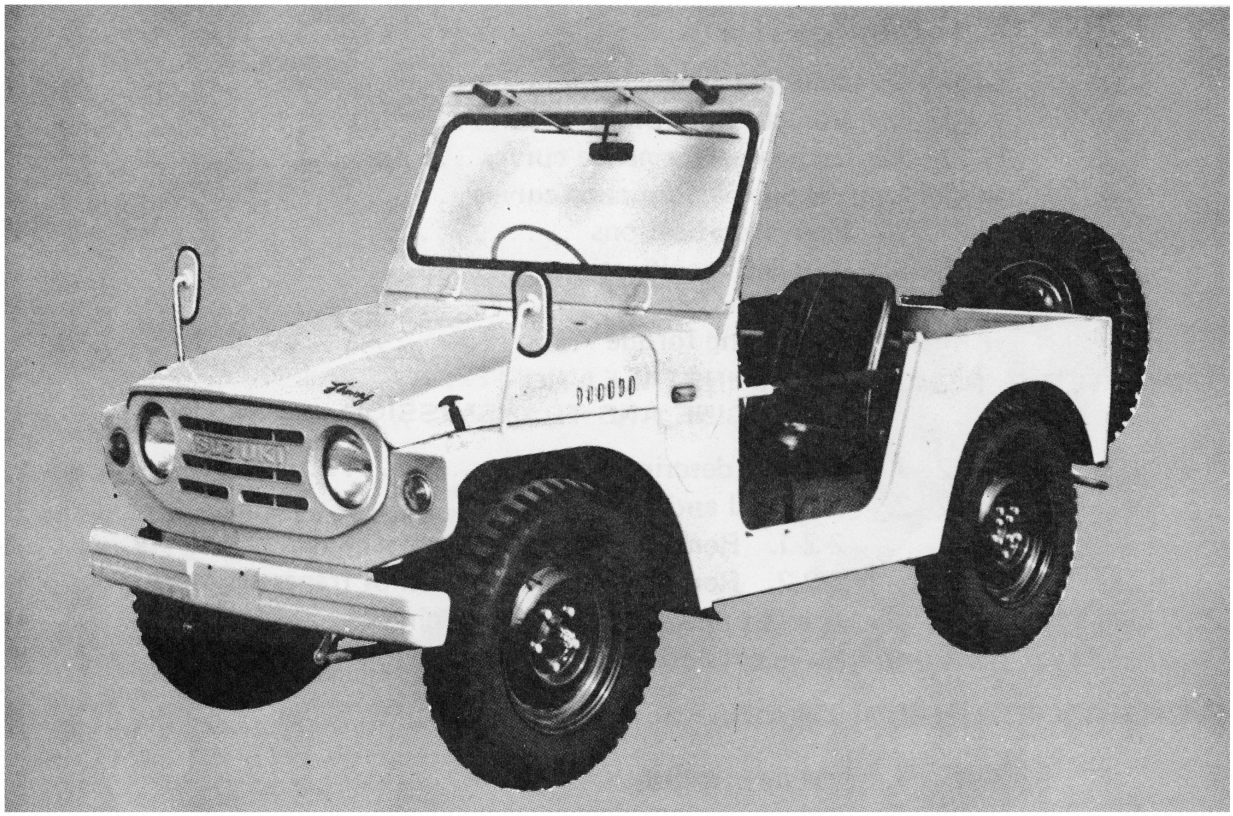


Fig. 1–1.

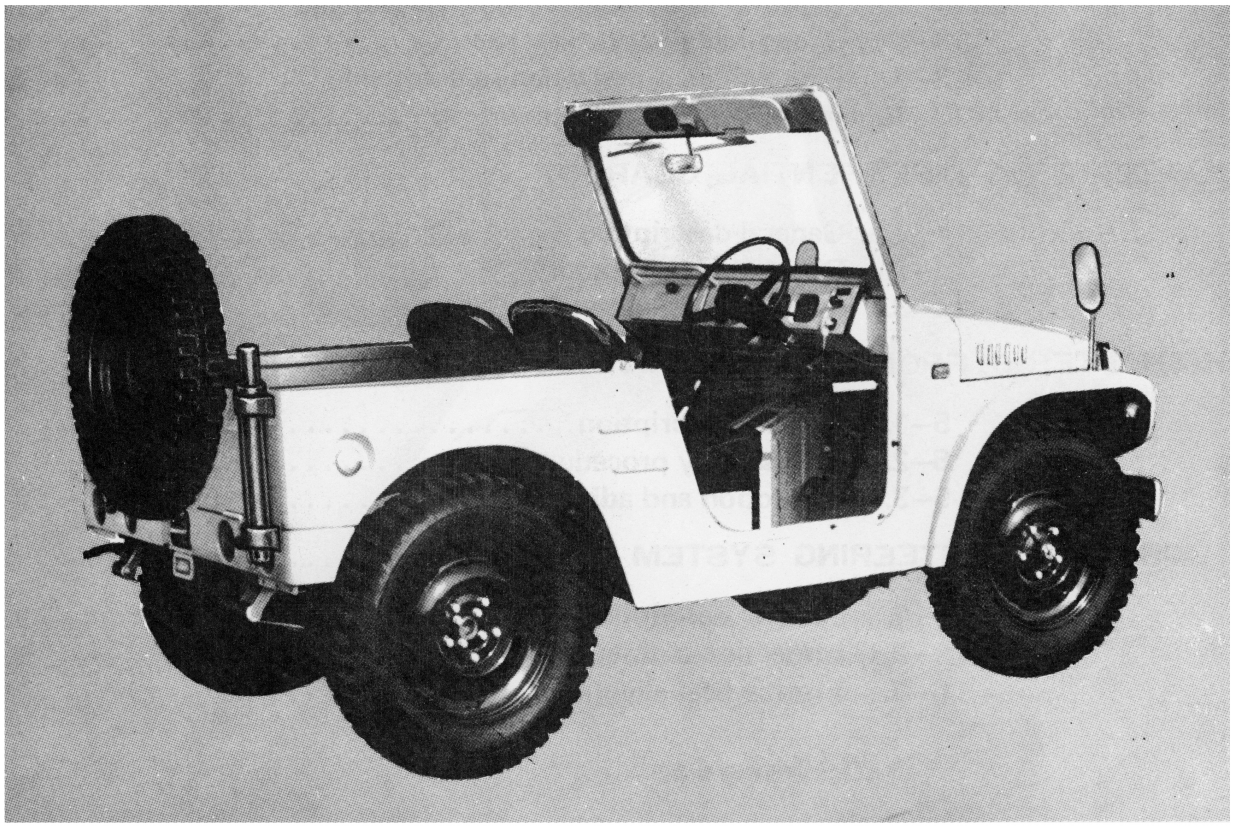


Fig. 1–2.

1–2. Vehicle dimensions

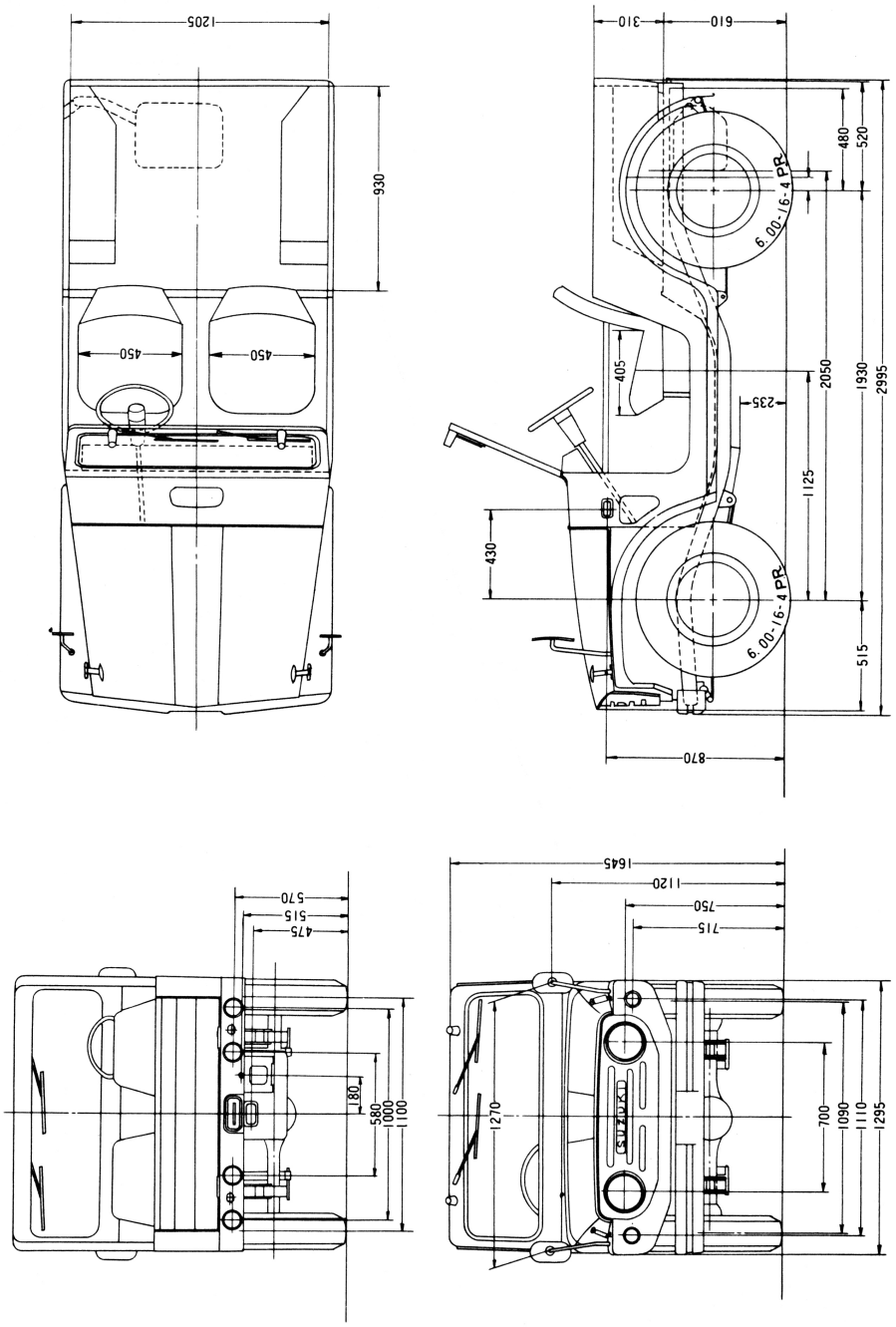


Fig. 1–3

1–3. Engine performance curves

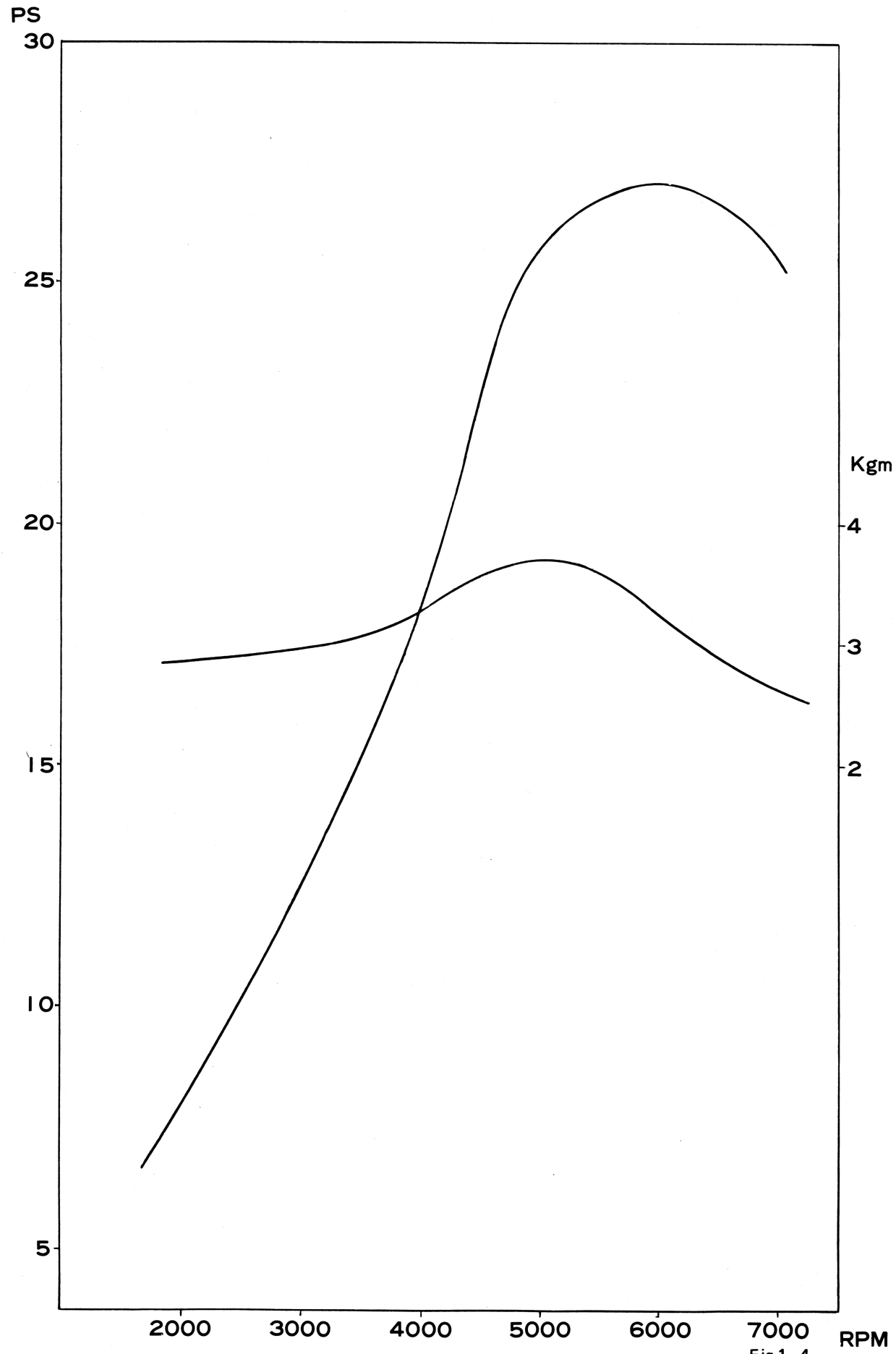


Fig.1–4.

1–4. Vehicle performance curves

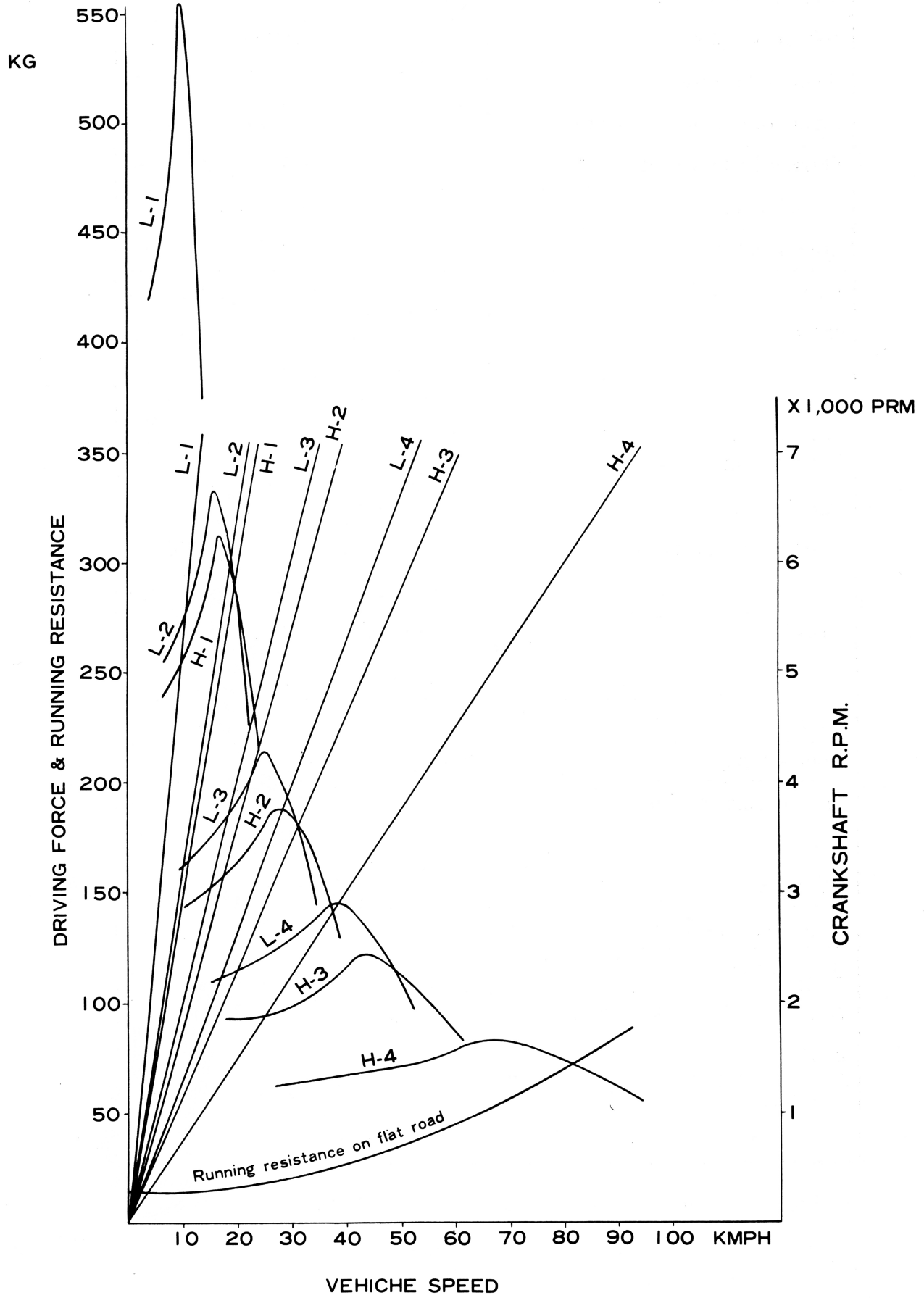


Fig. 1–5.

1–5. Main specifications

Type and model		Suzuki LJ10
Vehicle weight		630 kg (1,388 lb)
Seating capacity		2
Maximum loading capacity		250 kg (551 lb)
Gross vehicle weight		960 kg (2,116 lb)
Overall length		2,995 mm (117.9 in)
Overall width		1,295 mm (51.0 in)
Overall height		1,670 mm (65.7 in)
Internal size of cargo bed	Length	930 mm (36.6 in)
	Width	1,205 mm (47.4 in)
	Height	1,055 mm (41.5 in)
Distribution of load when not laden	Front wheels	325 kg (716 lb)
	Rear wheels	275 kg (606 lb)
Distribution of load when laden	Front wheels	365 kg (805 lb)
	Rear wheels	595 kg (1,312 lb)
Tread	Front wheels	1,090 mm (42.9 in)
	Rear wheels	1,100 mm (43.3 in)
Type		Bonnet
Engine type		2 stroke, air cooled gasoline engine
Piston displacement		359 cc (21.9 cu in)
Fuel		Gasoline
Wheelbase		1,930 mm (76.0 in)
Body rear overhang		520 mm (20.5 in)
Body offset		55 mm (2.2 in)
Maximum allowable inclination angle	Right	39°
	Left	39°
Tire size	Front wheels	6.00–16in–6PR
	Rear wheels	6.00–16in–6PR

* The specifications subject to change without notice.

1–6. Detailed specifications

□ Dimensions

Ground clearance	235 mm (9.25 in)
Clearance between deck floor and ground	610 mm (24.0 in)
Body front overhang (excluding bumper)	515 mm (20.3 in)
Body rear overhang (excluding bumper)	520 mm (20.5 in)
Center of gravity in height	595 mm (23.4 in)

□ Performance

Maximum speed	80 km/h (50 mph)
Climbing ability	27.5°
Minimum turning radius	4.4 m (14.4 ft)
Braking distance	7 m (23 ft)/35 km/h (22 mph)

□ Engine

Type	2 stroke
Cooling method	Air-cooled
No. of cylinders and arrangement	2-cylinder in line
Combustion chamber type	Cone
Bore x stroke	61 x 61.5 mm (2.40 x 2.42 in)
Piston displacement	359 cc (21. 9 cu in)
Compression ratio	5.8
Compression pressure	9.5 kg/cm² (135 lb/in²)/1,000 rpm
Maximum output PS/rpm	27 ps/6000 rpm
Maximum torque	3.7 kg-m (26.8 lb-ft)/5000 rpm
Engine dimensions (Length x width x height)	482 x 515 x 334 mm (19.0 x 20.3 x 13.1 in)
Engine transmission unit weight	50 kg (110 lb)
Position of engine	On front axle
Piston type	Slipper
Piston material	Alsil
Number of piston rings	3
Exhaust port timing (opens at)	69°
Exhaust port timing (close at)	69°
Starting system	Starter generator

□ Ignition system

Ignition method	Battery
Ignition timing (BTDC)	16°
Distributor	Contact point type
Spark plug	NGK B-7HZ
Spark plug gap	0.6~0.7 mm (0.024~0.028 in)

□ Fuel system

Carburetor	one, HITACHI HAA30
Air cleaner	Resin processed fibrous tissue
Fuel pump	Diaphragm
Fuel tank capacity	26 ltr (6.9/5.7 gal, US/Imp)

□ Lubricating system

Engine lubrication	Suzuki CCI
Oil pump type	plunger
Oil tank capacity	3.5 ltr (0.9/0.8 gal, US/Imp)
Gearbox oil capacity	0.8 ltr (0.8/0.7 qt, US/Imp)

□ Power transmission system

Power train	Engine-clutch-transmission
Clutch	Dry, single plate
No. of clutch disc	1
Clutch facing	160 x 100 x 3 mm (6.3 x 3.9 x 0.12 in) (outside dia. x inside dia. x thickness)
Total friction area	106 cm^2 (16.4 in^2)
Transmission gear	4 forward, 1 reverse all forwars synchromesh
Gear shifting	Floor shift
Gear ratio low	2.833 : 1
second	1.706 : 1
third	1.091 : 1
top	1.000 : 1
reverse	2.833 : 1
Propeller shaft	
first propeller shaft	420 x 21.5 x 0 mm
(length x outside dia x inside dia)	(16.5 x 0.85 x 0 in)
second propeller shaft	545 x 635 x 60.7 mm
(length x outside dia x inside dia)	(21.5 x 25.0, x 2.4 in)
third propeller shaft	574 x 25.0 x 0 mm
(length x outside dia x inside dia)	(22.6 x 0.99 x 0 in)
Universal joint	Cross type
Final drive gear	Hypoid gear
Gear ratio	5.667
Differential gear and no. of gears	Straight bevel gear. 6
Housing	Banjo type

□ Steering system

Gear type	Ball-nut
Gear ratio	15.4 : 1
Steering angle (inner)	33°
(outer)	28°
Steering wheel diameter	380 mm (15.0 in)

□ Drive system

Wheel arrangement	front 2, rear 2
Front axle type	Semi-floating
Toe-in	2~6 mm (0.08~0.24 in)
Camber	1°
Caster	4°
Trail	24 mm (0.94 in)
King pin inclination	9°
Rear axle type	Semi-floating

□ Brake system

Service brake

Brake type ..... Hydraulic internal-expanding two leading shoe type on front wheels and leading-trailing type on rear wheels

Lining size (front & rear) .....35 x 4 x 195 mm
(Width x thickness x length) (1.38 x 0.16 x 7.68 in)

Total lining area (front & rear).....68 cm^2 (10.5 in^2) x 2 pieces x 4 wheels

Brake drum diameter (front & rear)..... 210 mm (8.27 in)

Master cylinder bore ..... 19.05 mm (0.75 in)

Wheel cylinder bore (front) .....25.4 mm (1.0 in)
(rear) .....22.2 mm (0.87 in)

Braking force .....590 kg (1,300 lb)
(When foot pressure of 0.6 kg (1.3 lb) is applied)

Parking brake

Brake type ..... Mechanical brake acting on propeller shaft

Lining size ..... 30 x 4 x 170 mm (1.18 x 0.16 x 6.7 in)

Liming area ..... 51 cm^2 (7.9 in^2) x 2 pieces

Brake drum diameter .....180 mm (7.1 in)

□ Suspension

Front suspension type .....Axle type

Front springs ..... 940 x 50 x 5 mm-4 (37.0 x 2.0 x 0.2 in)
(Length x width x thickness-number of springs)

Rear suspension ..... Axle type

Rear springs ..... 1000 x 50 x 6 mm-3 (39.4 x 2.0 x 0.24 in)
(Length x width x thickness-number of springs)

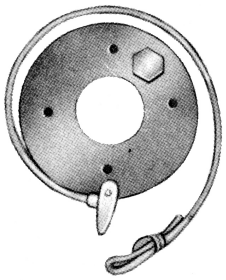
Shock absorber type (front)..... Telescopic double-acting
(rear) ..... Telescopic double-acting

Frame type ..... Ladder type

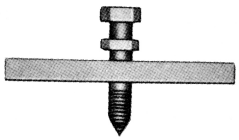
* The specifications subject to change without notice.

1–7. Special tools

Special tools listed here are used to disassemble, assemble and perform other maintainance and service. These special tools make work easy which cannot done simply with ordinary tools and also do not damage parts. It is recommended to provide these special tools as shop equipment.



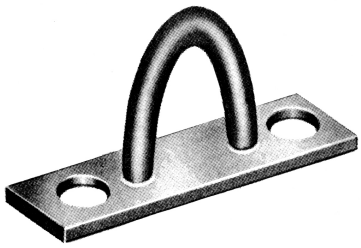
09922–75220
Differential pre-load checking tool



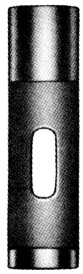
09923–05110
Flywheel puller



09922–85810
Spring pin remover



09922–66010
Rear axle shaft remover

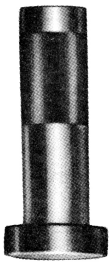


09913–80111
Drive bevel pinion rear bearing inner race pressure fitting tool

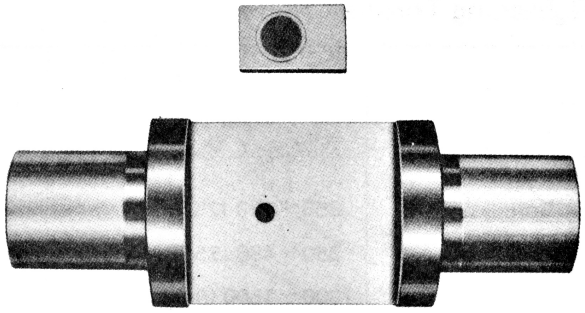


09913–76010
Drive bevel pinion front bearing outer race pressure fitting tool

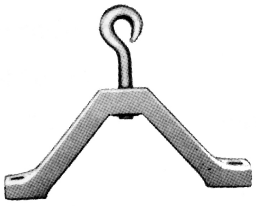
Fig. 1–6.



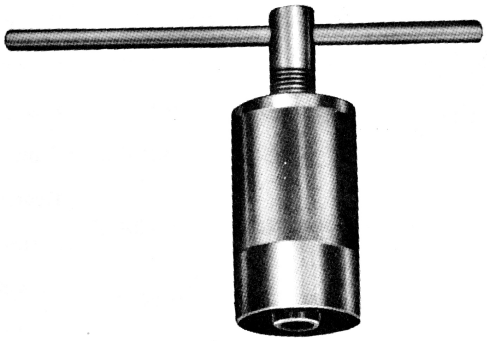
09913–85210
Drive bevel pinion rear bearing
race pressure fitting tool



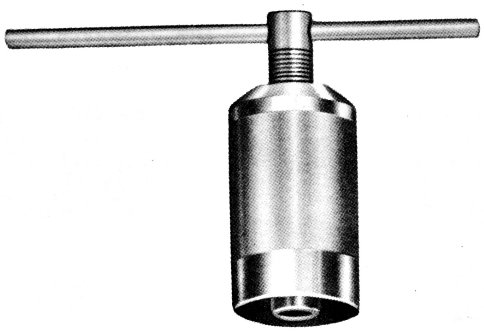
09922–76010
Drive bevel pinion
shim adjusting tool



09943–35511
Front wheel hub remover



09922–55210
Front shaft remover



09922–65122
Transfer gear input
shaft remover

Fig. 1–7.

1–8. Tightening Torque

Item	Tightening torque kg-m (lb-ft)	Item	Tightening torque kg-m (lb-ft)
Cylinder Head Bolt	350～480 (25.3～34.7)	Steering Shaft Nut	250～400 (18.1～28.9)
Cylinder Nut	350～480 (25.3～34.7)	Steering Rubber Joint Nut	150～250 (10.8～18.1)
Flywheel Nut	1300～1500 (94.0～108.5)	Rubber Joint Flange Bolt	300～400 (21.7～28.9)
Crankcase Bolt (10φ)	350～ 480 (25.3～34.7)	Steering Gearbox Bolt	700～900 (50.6～65.1)
Crankcase Bolt (6φ)	60～ 100 (4.3～7.2)	Gearbox Stay Bolt	350～550 (25.3～39.8)
Transmission-Case Nut	350～ 480 (25.3～34.7)	Steering Tie Rod Lever Nut	500～900 (36.2～65.1)
Fan Bolt	350～ 480 (25.3～34.7)	Tie Rod End R Lock nut	500～800 (36.2～57.8)
Check Valve	150～ 190 (10.8～13.7)	Tie Rod End L Lock Nut	500～800 (36.2～57.8)
Oil Pump Union Bolt	35～ 45 (2.5～3.3)	Tie Rod End Ball Stud Nut	250～550 (18.1～39.8)
Inlet Manifold Nut	60～ 100 (4.3～7.2)	Brake Master Cylinder Bolt	90～140 (6.5～10.1)
Carburetor Nut	110～ 160 (8.0～11.6)	Union Nut	120～160 (8.7～11.6)
Exhaust Manifold Bolt	150～ 200 (10.8～14.5)	Brake Hose Nut	200～300 (14.5～21.7)
Transfer-side Universal Joint Flange Nut	900～1500 (65.1～108.5)	Brake Pipe Joint Nut	60～100 (4.3～7.2)
Drive Bevel Pinion-side Joint Yoke Nut	900～1500 (65.1～108.5)	Rear Brake Backing Plate Nut	180～280 (13.0～20.2)
Transmission Case Bolt (8φ)	150～ 200 (10.8～14.5)	Parking Lever Bolt	90～140 (6.5～10.1)
Transmission Case Bolt (6φ)	60～ 100 (4.3～7.2)	Parking Lever Bracket Bolt	90～140 (6.5～10.1)
Transmission Drain Plug	300～ 500 (21.7～36.2)	Parking Brake Backing Plate Bolt	180～280 (13.0～20.2)
Transmission Oil Level Plug	300～ 500 (21.7～36.2)	Differential Carrier Nut	180～280 (13.0～20.2)
Reverse Gearshift Lever Bolt	250～ 300 (18.1～21.7)	Cross Joint Flange Yoke Bolt	150～250 (10.8～18.1)
Cross Joint Flange Yoke Bolt	150～ 250 (10.8～18.1)	Pedal Bolt Nut	180～280 (13.0～20.3)
First Muffler Nut	90～120 ((6.5～8.7)	Front Seat Belt Ass'y	250～450 (18.1～32.5)
Shackle Pin Nut	250～700 ((18.1～50.6)	Front Mounting Bolt	90～140 (6.5～10.1)
Spring Pin Nut	400～ 800 (28.9～57.8)	Rear Mounting Nut	90～140 (6.5～10.1)
U Bolt Nut	300～ 450 (21.7～32.5)	Transfer Mounting Nut	90～140 (6.5～10.1)
Wheel Nut	500～ 800 (36.2～57.8)	Control Lever Housing Bolt	250～400 (18.1～ 28.9)
Front Wheel Shaft Nut	1500～2700 (108.5～195.2)	Control Lever Guide Plate Bolt	60～100 (4.3～7.2)
Rear Hub Nut	500～800 (36.2～ 57.8)	Second Muffler Nut	90～120 (6.5～8.7)
King Pin Bolt	200～ 300 (14.5～21.7)		
Front Brake Backing Plate Bolt	180～ 280 (13.0～20.2)		
Axle Housing Drain Plug	400～ 700 (28.9～50.6)		

CHAPTER 2. REMOVAL AND INSTALLATION OF ENGINE AND TRANSMISSION

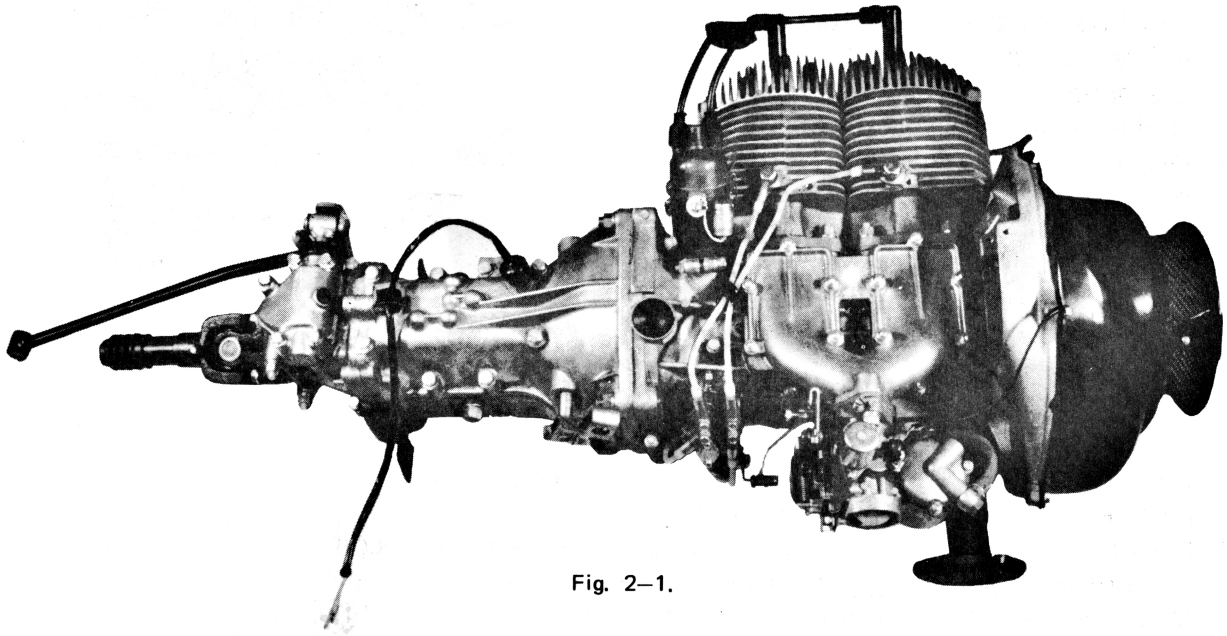


Fig. 2–1.

2–1. General description

The model LJ10 is a 2-cycle air-cooled 2-cylinder reed valve engine featuring a sturdy construction, toughness and a long service life and is identical in design to the engine installed on the Suzuki Carry model L40.
The engine incorporates an aluminum cylinder block which is high in cooling efficiency to withstand severe operating conditions. The transmission is also identical in design to the unit employed in the model L40 except for the gear control mechanism.
The transmission has synchronized 4 forward gears and 1 reverse gear which are remotely controlled through a single gearshift rod. The gearshift lever is positioned on the center of the floor. The engine is supported on the front axle and the transmission unit is coupled with the transfer unit on the center part of the chassis by means of the propeller shaft.
The drive torque is carried from the transfer unit to the front and rear wheels by means of the propeller shafts.
The engine and transmission disassembly and reassembly procedures are omitted as they are basically equal to the engine and transmission disassembly and reassembly procedures for the engine of the model L40. The following paragraphs deal with the removal and installation procedures for the engine and transmission assembly.

2–2. Removal and installation

Removal and installation of the engine and transmission assembly becomes necessary only when servicing or replacing the crankshaft or when overhauling the transmission unit. The following paragraph introduces the procedure for removing the engine and transmission units independently as it is considered to be the easiest way of service operation:

2–2–1. Removal and installation of engine assembly

1) Take out the four(4) screws fixing the engine hood hinges to the body and remove the engine hood.
2) Take out the six(6) 6mm bolts and remove the front grille.

3) Disconnect the fuel hose at the fuel pump and fasten the loose end of the fuel hose to the body (fuel tank side) to prevent leakage of fuel.
4) Disconnect the carburetor air pipe, choke cable and accelerator cable.
5) Disconnect the solenoid lead at the positive (+) terminal of the ignition coil.
6) Disconnect the engine oil hose at the intake port of the oil pump and fasten the loose end of the hose to the body to prevent leakage of oil from the oil tank.

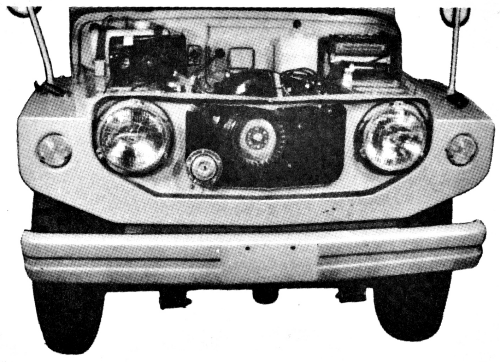


Fig. 2–2.

7) Disconnect the starter motor and generator connections at the voltage regulator (installed on the dashboard in the cabin), withdraw the cords to the engine compartment and remove the cable clamps.
8) Disconnect the distributor negative lead (–) at the ignition coil terminal.
9) Pull out the high-tension cord from the ignition coil.
10) Disconnect the exhaust flexible pipe at the exhaust manifold flange.
11) Take out the four(4) 10mm nuts fastening the engine crankcase with the transmission case.
12) Check to make sure that all the cables and wires are disconnected.
13) Remove the front engine mounting member from the engine mount rubber.

Note: Leaving the engine mounting rubbers on the body side will facilitate removal of the engine assembly. However, installing the engine mounting rubbers on the front engine mounting member will facilitate operations when installing the engine assembly in position.

14) Move the engine forward until it separates from the studs fastening the transmission case to the engine crankcase and then lift the engine off the position. The engine can be removed easily by hoisting with a chain hoist with a rope hooked to the engine unit.

* Where the service operations are limited to the engine overhauling and removal of the transmission case is unnecessary, the front end of the transmission case may be held in horizontal position with a rope or a jack so that the transmission rear mounting rubbers are relieved of undue stress.

2–2–2. Removal and installation of transmission gearbox

1) Remove the engine assembly by following the removal procedures outlined in the foregoing paragraphs.
2) Disconnect the lead wires from the back-up light switch.
3) Disconnect the clutch wire at the clutch release lever.
4) Disconnect the gearshift rod at the gear control lever.
5) Work away the rubber boot covering the propeller shaft splines.
6) Take out the two (2) 8mm nuts from the transmission mounting rubber.
7) Move the transmission case forward and then lift it off the position.

2–3. Points to be noted when servicing

(1) Carburetor

The engine comes equipped with a side-draft Solex type carburetor which differs from the carburetor for model L40 in the specifications. The starting system of the carburetor for model L40 is the starter plunger type while the carburetor for model LJ10 is the choke valve type.

	Main jet	Main air jet	Slow jet	Slow air jet	Pilot air adjusting screw	Valve seat
L40 (MIKUNI)	#110	#120	#48	#120	Screw all way in and back out 2-3/4 turns	1.2$^{\phi}$
LJ10 (HITACHI)	#112	#150	#45	#110	Screw all way in and back out 2-1/8 turns	1.2$^{\phi}$

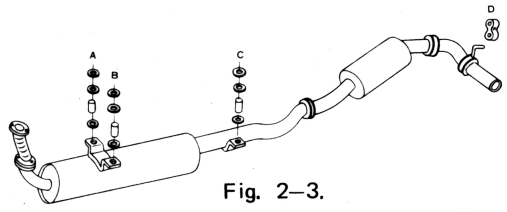


Fig. 2–3.

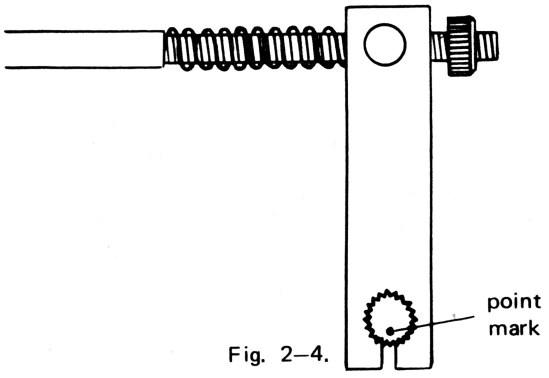


Fig. 2–4.

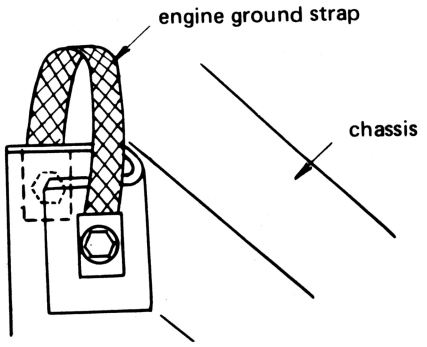


Fig. 2–5.

(2) Installation of primary and secondary mufflers

The primary and secondary mufflers are supported in position with the brackets A, B, C and D as shwon in the Fig. 2–3 and to keep the flexible pipe free from distorsion, position adjustment should be made at the points A, B, C and D when installing the mufflers.

(3) Reassembly of clutch release lever and clutch release shaft

Connect the clutch release lever with the clutch release shaft so that the slit in the lever is correctly aligned with the point mark on the shaft as shown in the Fig. 2–4.

(4) Installation of engine grounding strap

The engine grounding strap should be fastened to the chassis frame with the right side transmission mounting near the transmission unit as shown in the Fig. 2–5.

2–4. Service data

Spark plugs	NGK B-7HZ
Ignition timing	16±1° B.T.D.C. (1.30–1.67mm (0.051~0.066in) in terms of piston stroke)
Compression pressure	9.5kg/cm^2 (135 lb/in^2)/1,000 rpm
Idling speed	800rpm
Air cleaner	Service at every 1,000km (600miles) when operated under very dusty conditions and at every 3,000km (2,000miles) when mainly operated on paved roads. Replace filter at every 15,000~20,000km (10,000~12,000miles) interval.
Fuel filter replacement	Replace at every 35,000~40,000km (20,000~25,000 miles) interval.
Cylinders	Bore: 61mm $^{+0.021}_{+0.007}$ (2.401in $^{+0.0008}_{+0.0003}$). Limit of wear: 0.05mm (0.0019in)
Pistons	61mm $\phi^{-0.037}_{-0.052}$ (2.401 in $\phi^{-0.0014}_{-0.0020}$) when measured at the portion 20mm (0.787in) away from the lower end of the skirt. Piston clearance: 0.105~ 0.110mm (0.0041~0.0043in)
Oil pump delivery	2.3–3.1cc within 2 minutes when tested by operating the engine at 1,000±100 rpm. (oil pump control lever is set in such a position that full delinery can be obtained.)
Distributor	Point gap: 0.35~0.45mm (0.014~0.018 in) Dowel angle: 47°
Starter generator	Brush length: 20mm (0.787 in) Limit of wear: 13mm (0.512in)
	Commutator diameter: 46mm (1.811 in) Limit of wear: 44mm (1.732 in)
Battery	12V 24AH
Transmission gear oil capacity	SAE #90 0.8ℓ (0.85/0.70 qt, US/Imp)
Differential gear oil capacity	SAE #90 0.8ℓ (0.85/0.70 qt, US/Imp)
Transfer case gear oil capacity	SAE #90 0.7ℓ (0.74/0.62 qt, US/Imp)
Locating spring	Free length: 23mm (0.91in) Limit of reduction in length: 21mm (0.83 in) (in common to all 3 springs)
Accelerator cable play	0–3mm (0~0.118 in) at the pedal travel

CHAPTER 3. TRANSFER GEARBOX

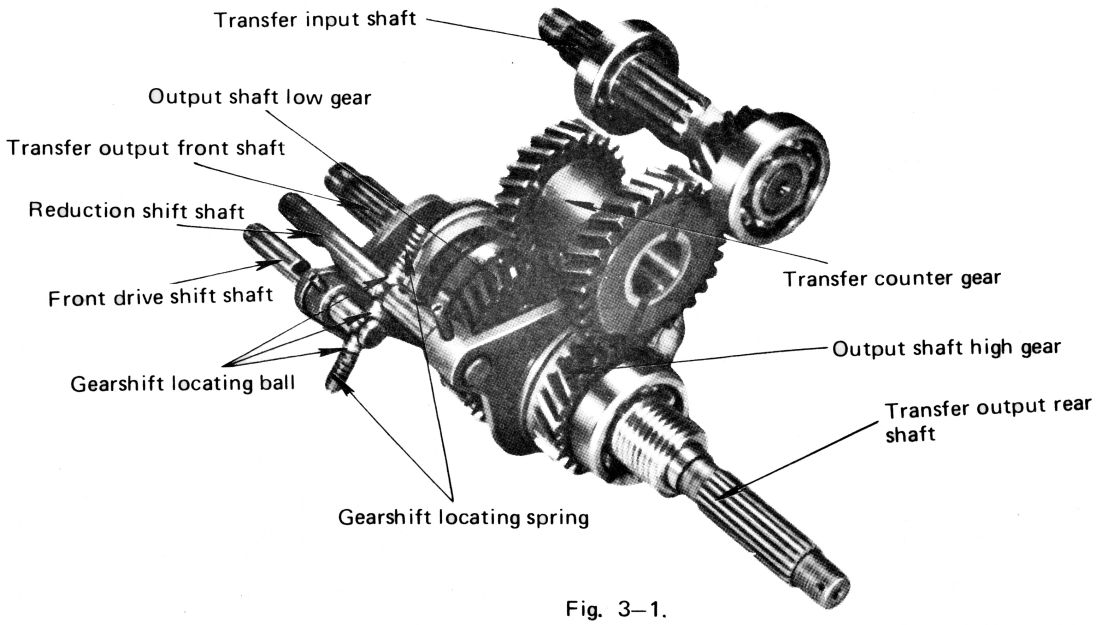


Fig. 3–1.

3–1. General description

The "Transfer gearing" is a term given to the auxiliary transmission adapted for carrying the drive torque to all the drive wheels. The transfer gear assembly installed on the Suzuki LJ10 consists of the 2-speed gear box and all-wheel drive system including 3-shaft parallel constant mesh gears. The 2-speed gear box permits selection of high and low speeds while the all-wheel drive system permits switching of rear wheel drive and all wheel drive.

Both the 2-speed gear box and all wheel drive system are controlled by means of a single transfer gear control lever positioned near the floor tunnel in the cabin.

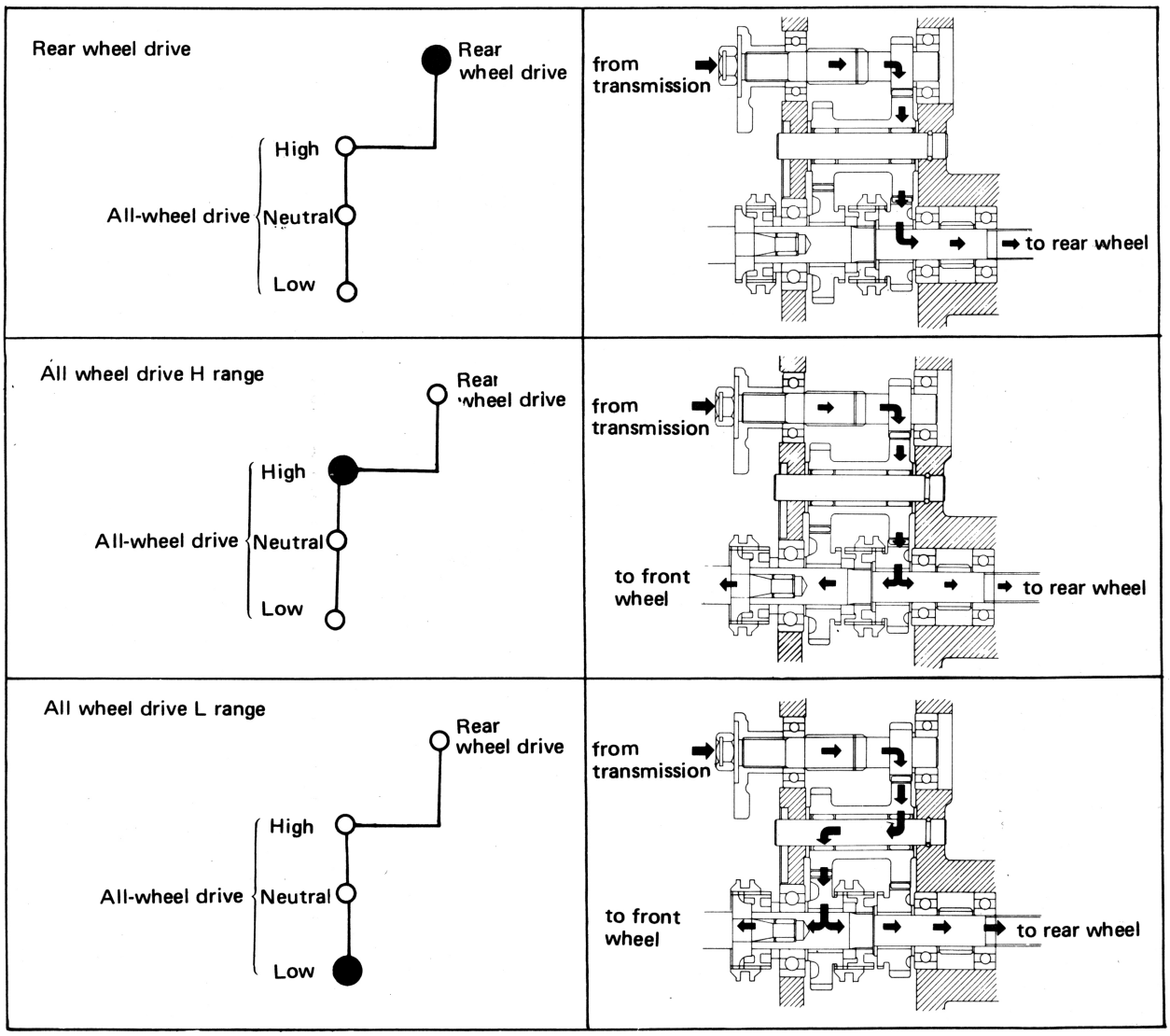
The transfer gear assembly has the constant-mesh gear arrangement just as in the case of the synchronized gear transmission unit with the synchronizer rings removed. For this reason, the transfer gear assembly can be serviced by following the conventional transmission service procedures.

3–2. Specifications of transfer gear assembly

	Gear ratio	Reduction ratio	Overall reduction ratio obtained when transfer gear box is shifted to H range	Overall reduction ratio obtained when transfer gear box is shifted to L range
Low	34/12	2.833	38.525	67.722
2nd	29/17	1.706	23.199	40.781
3rd	24/22	1.091	14.836	26.080
Top	–	1.000	9.713	17.075
Reverse	34/12	2.833	38.525	67.722
Primary reduction	28/20	1.400	–	–
Secondary reduction	34/6	5.667	–	–
Transfer gearbox H	29/14 x 24/29	1.714	–	–
Transfer gearbox L	29/14 x 32/22	3.013	–	–

Transfer gear oil capacity	SAE #90 0.7 ℓ (0.74/0.62 qt, US/Imp)

3–3. Operation of transfer gearing



3–4. Removal and installation of transfer gearbox

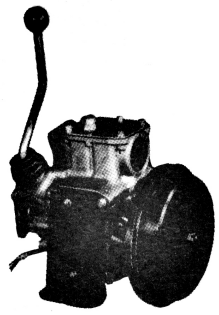


Fig. 3–2.

1) Remove the transfer gear control lever knob. The knob can be screwed out by turning it counter-clockwise.
2) Take out the cross-head screws (+) and remove the transfer gear box service hole cover.
3) Disconnect the three (3) propeller shafts at the universal joint flange by removing the bolts and nuts with the parking brake firmly applied to prevent turning of the propeller shaft.
4) Disconnect the parking brake cable and wire at the parking brake lever.
5) Disconnect the speedometer dirve cable. (This is positioned at the rear of the parking brake back plate.)
6) Take out the four (4) bracket bolts attaching the transfer case to the chassis frame crossmember and remove the transfer case.

Universal joint flange yoke bolt tightening torque:	150~250 kg–cm (10.8~18.1 ft–lb)

3–5. Disassembly of transfer gearbox

The disassembly operation of the transfer gear box can be split into two (2) distinct groups which include gear shifting mechanism, counter shaft and output shaft disassembly operations, and the general disassembly procedure is dealt with in the following as disassembly of either of the counter shaft or the output shaft involves disassembly of the entire transfer case assembly.

1) Drain the transfer case. The transfer case is filled with 0.7 ltr (0.74/0.62 qt, US/Imp) of gear oil.

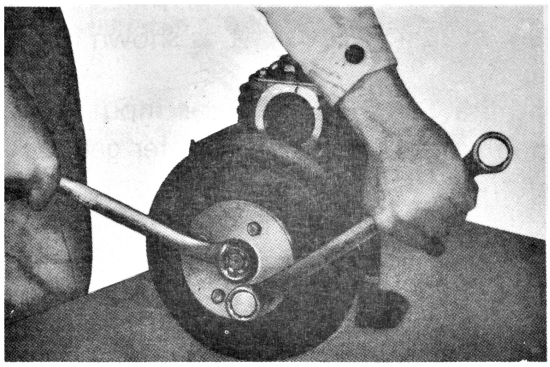


Fig. 3–3.

2) Hold the propeller shaft from turning by pulling the parking brake inner cable or by using a vise and disconnect the propeller shaft at the universal joint flange yoke.
3) Hold the parking brake drum from turning with the aid of the special tool (preload adjuster-09922–75220) and take out the parking brake setting nut as shown in the Fig. 3–3.
4) Remove the parking brake drum with the aid of the special tool (flywheel puller-09923–05110) as shown in the Fig. 3–4.

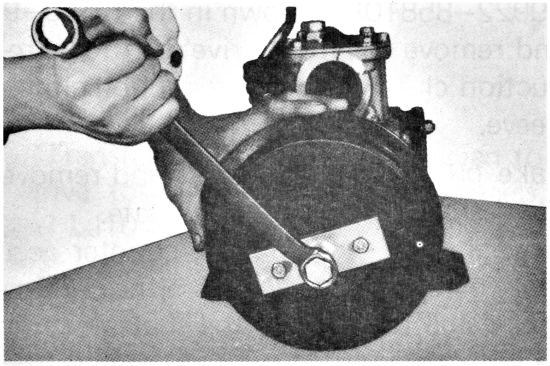


Fig. 3–4.

Parking brake drum set nut tightening torque:	900~1500 kg–cm (65.1~108.5 lb-ft)

5) Take out the four (4) bolts fixing the parking brake back plate and remove the back plate assembly.

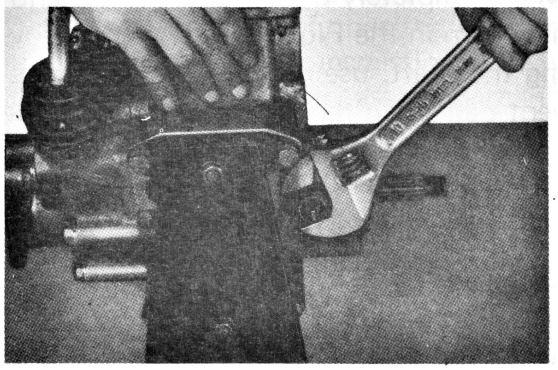


Fig. 3–5.

Parking brake back plate set bolt tightening torque (8 ϕ)	180~280 kg-cm (13.0~20.3 lb-ft)

6) Remove the speedometer driven gear as shown in the Fig. 3–5.
7) Remove the upper and lower transfer case covers.
8) Remove the transfer gear control lever assembly from the transfer gear front case in the following manner: Turn the gear control lever guide to the left while pushing it down as shown in the Fig. 3–6.
9) Take out the eight (8) 8mm nuts attaching the transfer gear front case and lightly tap the case with a wooden hammer.
The transfer gear output front shaft comp. comes out with the transfer gear front case. Drive out the transfer gear output shaft from the outside, using a wooden hammer.

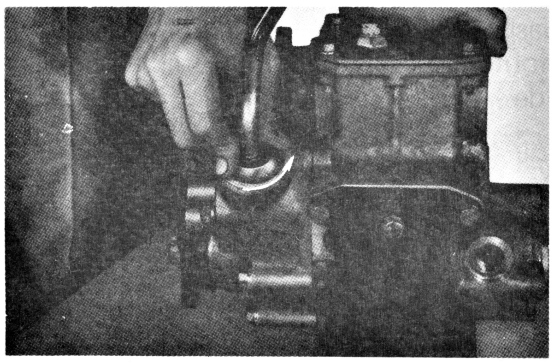


Fig. 3–6.

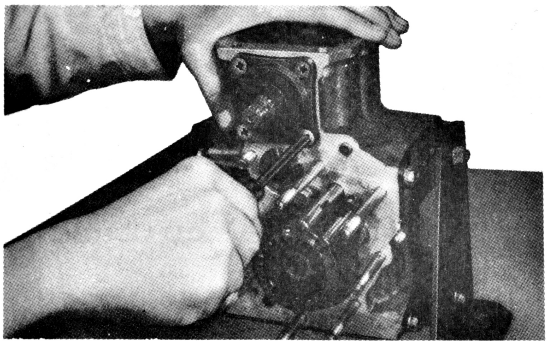


Fig. 3–7.

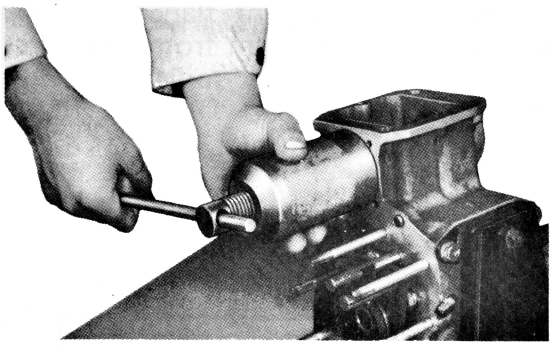


Fig. 3–8.

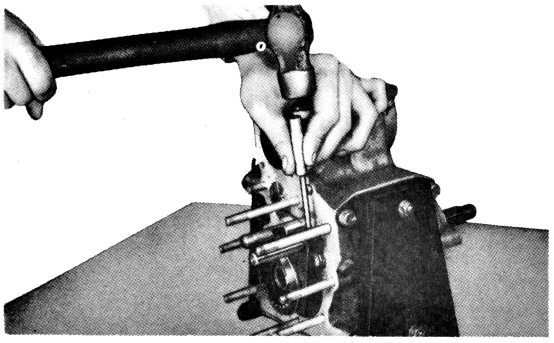


Fig. 3–9.

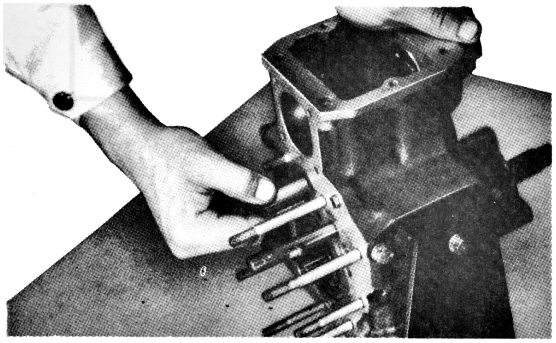


Fig. 3–10.

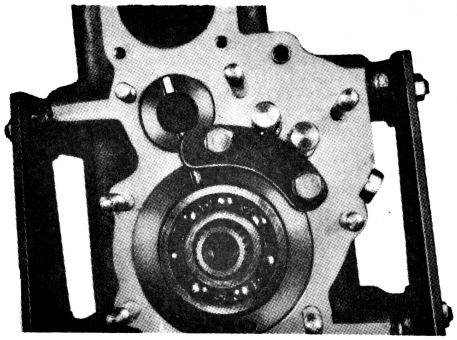


Fig. 3–11.

Removal of transfer gear input shaft

10) Take out the four (4) cross-head screws as shown in the Fig. 3–7 and remove the input shaft bearing retainer together with the oil seal.

11) With the aid of the special tool (main-shaft puller-09922–65122) pull out the transfer gear input shaft as shown in the Fig. 3–8.

* Withdraw the transfer gear input shaft, counter gear shaft and transfer gear output rear shaft toward the front of the vehicle (transmission case side).

Removal of counter gear shaft

12) Drive out the shift fork spring pin with the special tool (spring pin puller-09922–85810) as shown in the Fig. 3–9 and remove the front drive shift fork, reduction clutch hub and reduction clutch sleeve.

13) Take out the two (2) bolts and remove the gearshift fork shaft stop plate.

14) Drive out of position the counter gear shaft by lightly tapping from the parking brake side (the end of the shaft not fitted with the stopper pin) and remove the shaft completely by turning it with hand as shown in the Fig. 3–10. When removing the shaft, use reasonable care to prevent damaging the "O" ring fitted to the end of the counter gear shaft.

15) With the shaft removed, the transfer counter gears can be removed from the transfer case. When removing the counter gear, carefully note the position of the two (2) needle roller bearings, spacer and thrust washers of different thickness fitted to both sides of the gear. (The thrust washer in thickness of 3.8mm (0.15mm) should be positioned at the low speed side.)

Removal of shift fork shaft

16) Removal of the gear shift locating plug fitted to the side face of the transfer case permits removal of the gear shift locating spring and gear shift locating ball.

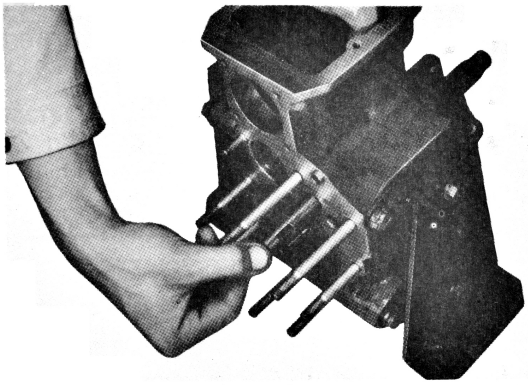
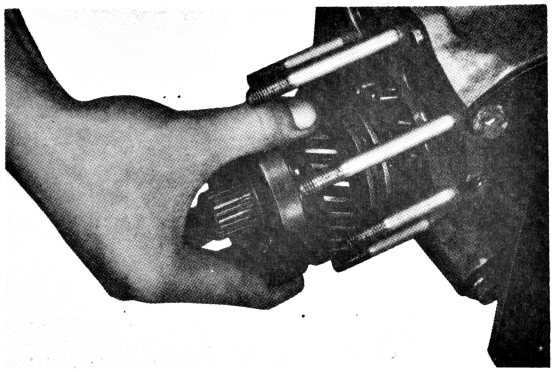


Fig. 3–12.

17) Pull out the front drive shift shaft and remove the gear shift locating ball.
18) Drive out the reduction shift fork spring pin from inside of the transfer case with the special tool (spring pin puller-09922–85810) and withdraw the reduction shift shaft as shown in the Fig. 3–12.
When removing the reduction shift shaft, NEVER turn it, or the gear shift locating ball will be rolled into the slot in the reduction shift shaft wedging the shaft in position.



Flg. 3–13.

Removal of transfer output rear shaft

19) With a wooden hammer drive out the transfer output rear shaft toward the transfer front case by lightly tapping from the parking brake side. The output rear bearing bush and output shaft gears can be removed together with the output rear shaft as shown in the Fig. 3–13.

3–6. Points to be noted when reassembling

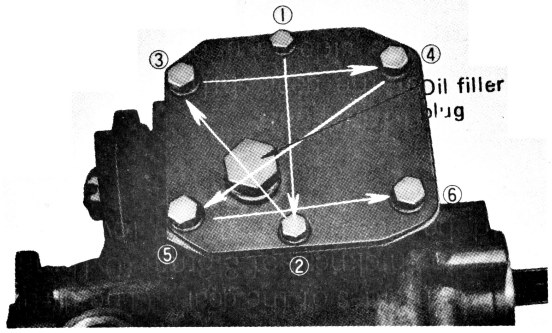


Fig. 3–14.

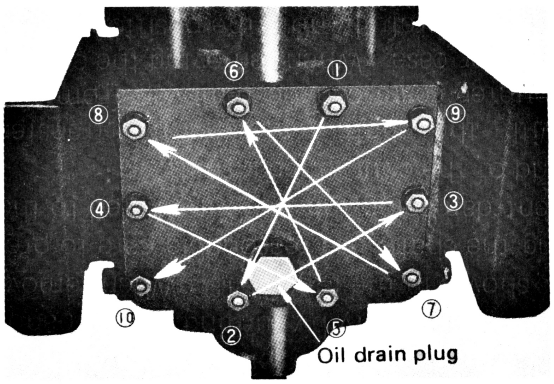


Fig. 3–15.

1) When installing the transfer case cover, make sure to tighten the bolts and nuts to the specified torques in the sequence as shown in the Fig. 3–14 and Fig. 3–15.

Transfer case cover set nut tightening torque: (6φ)	60~100 kg–cm (4.3~7.2 lb-ft)
Transfer case cover set bolt tightening torque: (6φ)	60~100 kg–cm (4.3~7.2 lb-ft)
Transfer case cover set bolt tightening torque: (8φ)	150~200 kg–cm) (10.8~14.5 lb-ft)

Remove the transfer case filler plug to fill the transfer case with gear oil.
0.7 ltr (0.74/0.62 qt, US/Imp) of gear oil is required to fill the case to the specified level.

Transfer case gear oil capacity:	SAE #90 0.7ℓ (0.74/0.62 qt, US/Imp)

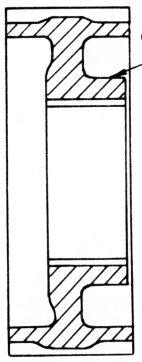


Fig. 3–16.

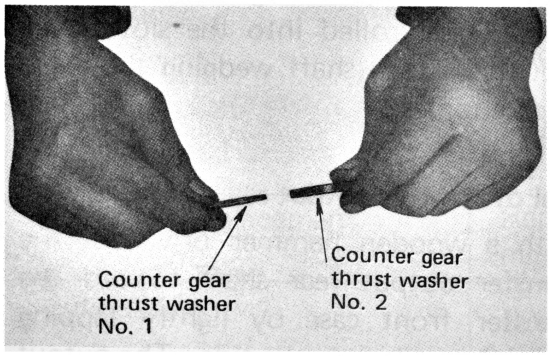


Fig. 3–17.

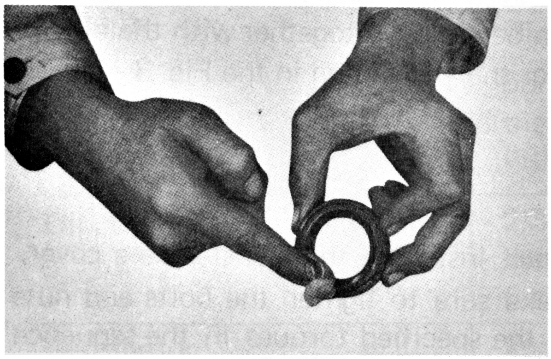


Fig. 3–18.

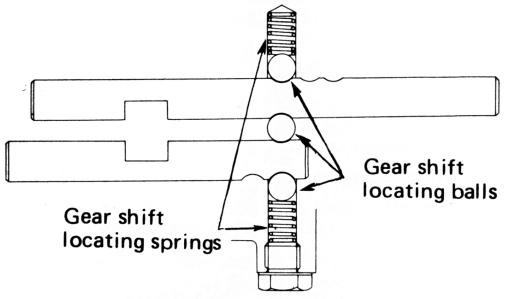


Fig. 3–19.

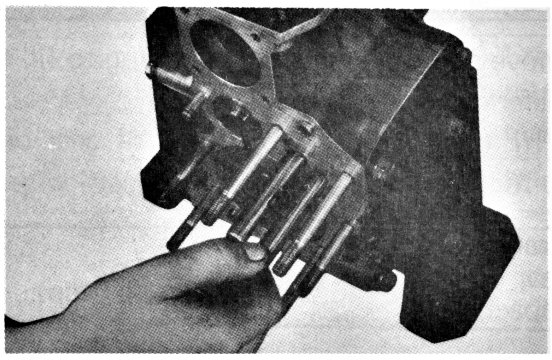


Fig. 3–20.

2) Install the transfer output rear shaft hub so that the face with the boss is turned toward the high speed gear side.
Install the transfer output front shaft hub so that the face of the hub (the hub on the outer face of the transfer case) with the boss is turned toward the transfer case side.

3) One each of the thrust washer of different thickness is fitted to both sides of the transfer counter gear.
Install the counter gear thrust washer No. 1 (2mm in thickness) on the high speed side and counter gear thrust washer No. 2 (3.8mm in thickness) on the low speed side.

4) Carefully check the oil seal lip for damage and apply thin coat of grease before installation as shown in the Fig. 3–18.

5) The gear shift locating spring and gear shift locating balls are fitted to the position as shown in the Fig. 3–19 to provide positive gear shift action and to prevent gears from slipping out of engagement. If the gears tend to slip out of engagement. check the free length of the gear shift locating spring and discard and install new one if it is beyond the service limit.

	Free length	Service limit
Gear shift locating spring	23mm (0.91in)	21mm (0.83in)

Install the shift shafts in the following manner:

Reassemble the reduction shift shaft (longer in length) with the shift fork and then fit the front drive shift shaft (shorter in length) in position after setting the gears to high speed position.
The reduction shift shaft should not be installed in position with the gears in neutral condition, or the double gear mesh inhibitor comes into function making it impossible to reassemble the front drive shaft into position.

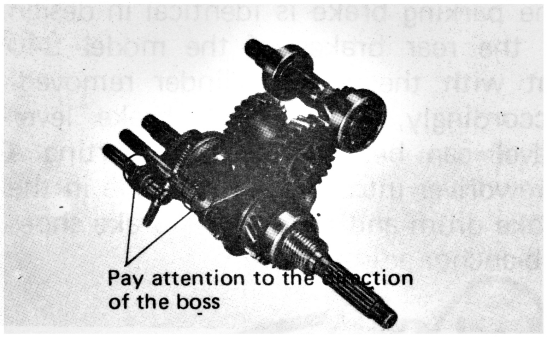


Fig. 3–21.

Install the reduction shift fork so that the face with the longer boss is turned toward the low speed side. Also install the front drive shift fork so that the face with the longer boss is turned toward the transfer case side.

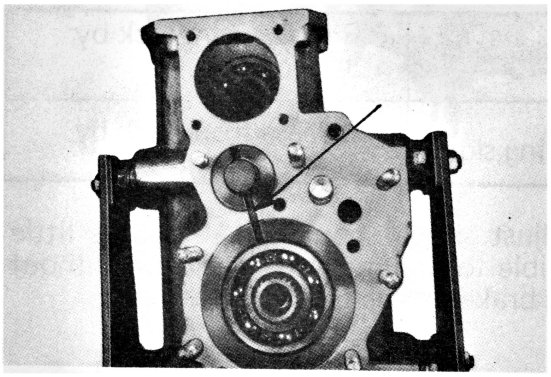


Fig. 3–22.

6) Make sure to have the output rear bearing bush stopper groove correctly aligned with the groove in the transfer case when installing the transfer output rear shaft as shown in the Fig. 3–22.

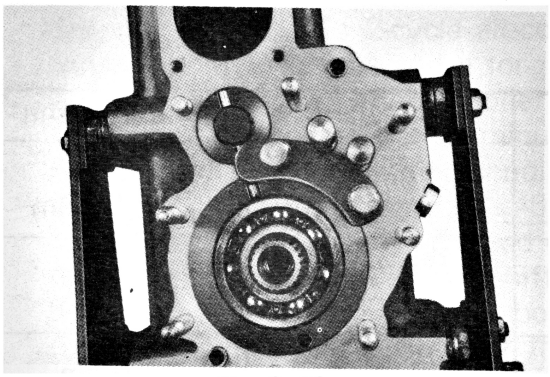


Fig. 3–23.

7) The gear shift fork shaft stop plate should be pressed hard agianst the shaft side before being fixed in position as it also serves to hold the output rear bearing bush, counter gear shaft and shift fork shaft from turning.

3–7. Inspection and adjustment

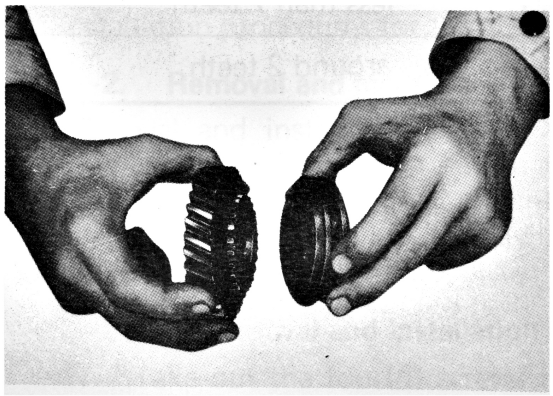


Fig. 3–24.

1) The transfer gear box is essentially a synchronized constant-mesh gear type transmission only with the synchronizer rings removed.
Therefore, the transmission inspection and adjustment procedures are directly applicable to the transfer case. In the course of inspection, check the gear teeth for abnormal condition, reduction clutch sleeve teeth and gear dog teeth for wear and damage. The transfer gear box is so designed that gear shfiting should not be attempted while the vehicle is in motion. The vehicle should be brought to a complete stop before transfer gear shifting is made.

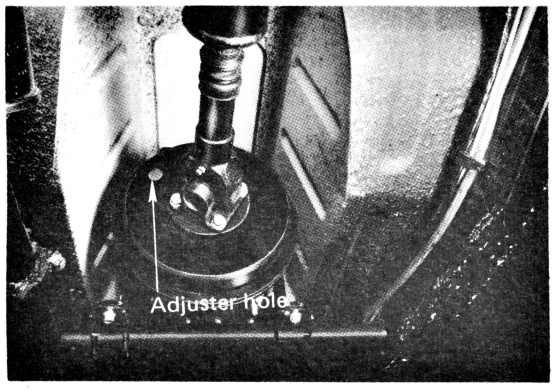


Fig. 3–25.

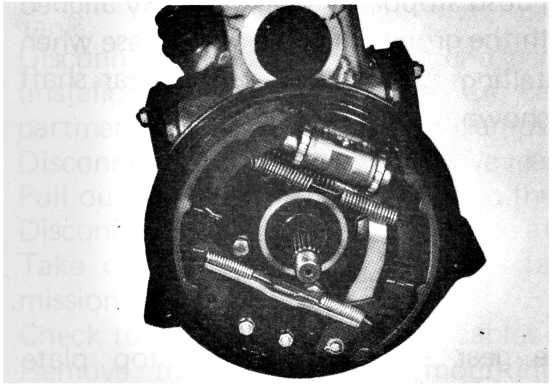


Fig. 3–26.

2) The parking brake is identical in design to the rear brakes of the model L40 but with the wheel cylinder removed. Accordingly, the parking brake lever travel can be adjusted by inserting a screwdriver into the adjuster hole in the brake drum and turning the brake shoes sub-anchor adjust sleeve.

Turns of adjust sleeve

Leading side	Release from lock by 3-7 notches
Trailing side	Release from lock by 4-8 notches

The adjust sleeve should be turned as little as possible to minimize the clearance without causing brake dragging.

	Standard	Service limit
Thickness of brake shoes	6mm (0.236in)	3mm (0.118in)
Brake drum inside diameter	180mm (7.08in)	182mm (7.16in)
Deformation of brake drum	–	0.5mm (0.02in)
Radius of curvature of brake lining friction face	90~91mm (3.54~3.58in)	
Parking brake lever standard travel	less than 7 teeth	
Parking brake lever free travel	around 2 teeth	

CHAPTER 4. DIFFERENTIAL GEARBOX

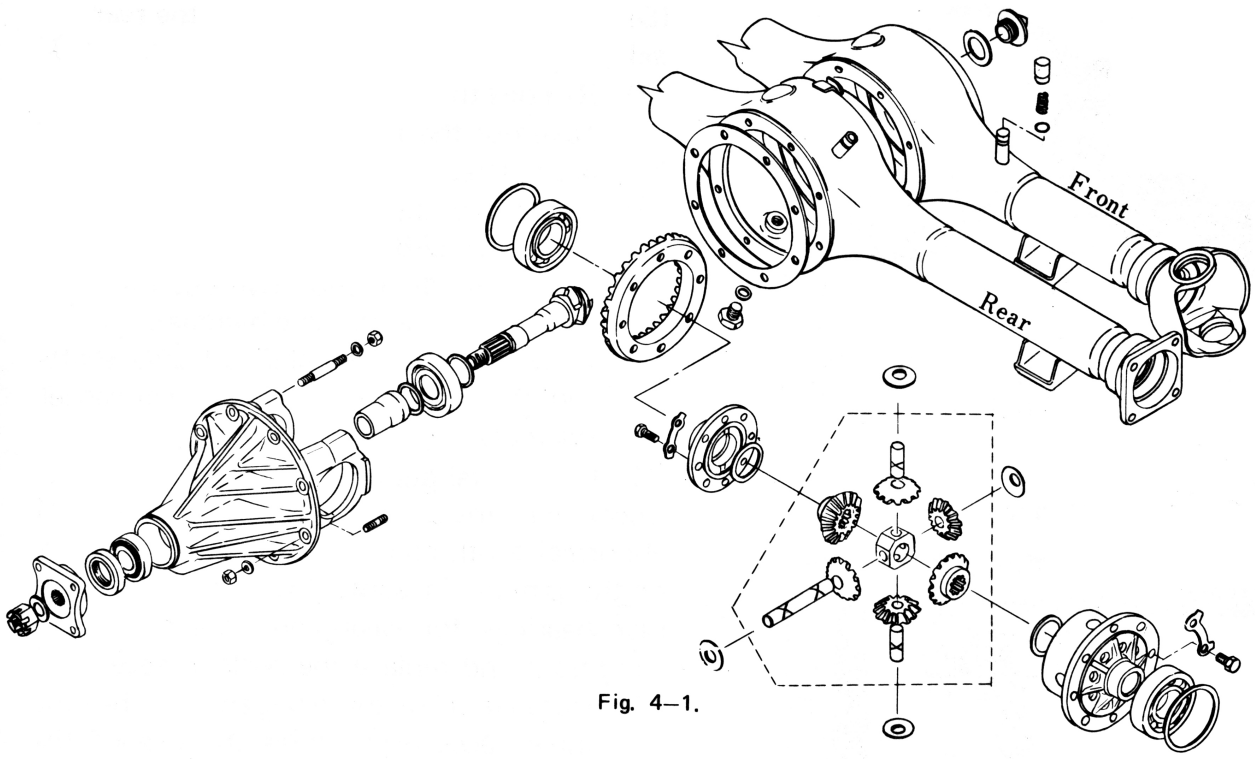


Fig. 4–1.

4–1. General description

The differential unit of the model LJ10 has the hypoid bevel gear arrangement with the center of the drive pinion offset below the center line of the bevel gear by 18mm (0.709 inch).
The differential unit employs four (4) each of side pinion to withstand severe operating conditions for which the vehicle is built. The differential gearbox consists of six (6) gears including two (2) side gears. The mounting distance measuring procedure, bearing preload adjustment and backlash adjustment procedures for the differential unit on model L40 are directly applicable to this differential unit. The differential assembly on the front axle and on the rear are exactly identical in design and construction.

4–2. Disassembly procedures

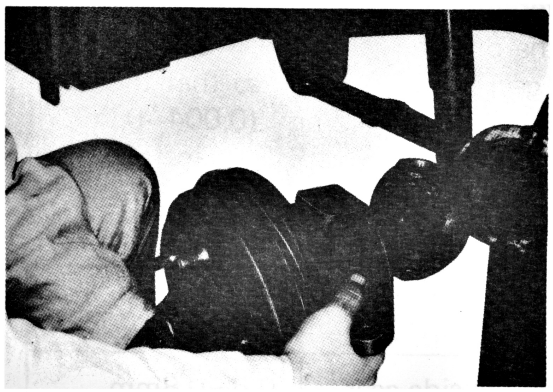


Fig. 4–2.

1) Jack up the vehicle and disconnect the propeller shaft at the cross joint flange yoke.
2) Take out the wheel nuts and remove the wheel.
3) Disconnect the brake pipe.
(Differential gearbox assembly on the front axle).
4) Take out the four (4) each of bolts on the upper and lower parts of the king pin.
5) Take off the tie rod end from the steering knuckle by removing the cotter pin & bolt.
6) Take out the eight joint seal bolts and pull out the front axle shaft as shown in the Fig. 4–2.

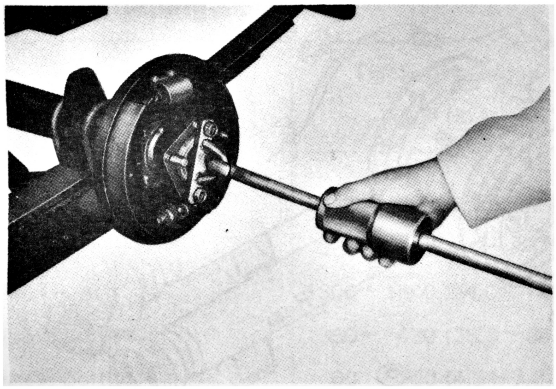


Fig. 4–3.

4–3. Inspection and servicing

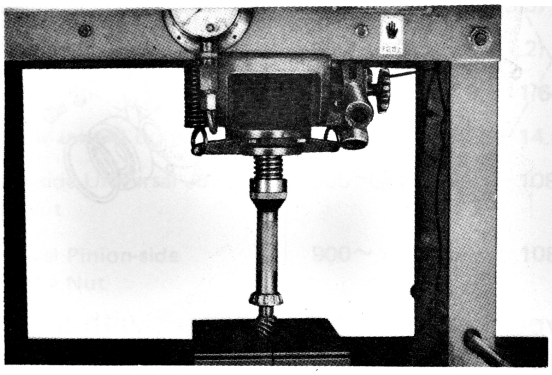


Fig. 4–4.

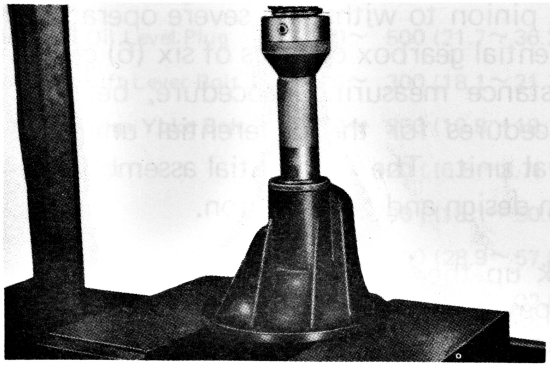


Fig. 4–5.

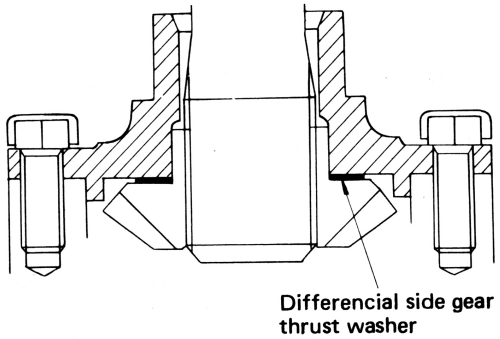


Fig. 4–6.

(Differential gearbox assembly on the rear axle)

7) Remove the brake drum.
8) Take out the four (4) bolts retaining the back plate.
9) Install the special tool (rear axle shaft puller-09922-66010) in position as shown in the Fig. 4–3 and drive out the shaft with the aid of a sliding hammer.
10) Withdraw the right and left axle shafts and then remove the differential carrier assembly.

(1) Drive bevel pinions

Check the drive bevel pinions for a sign of abnormal tooth contact. Also check the face of the pinions in contact with the front and rear bearings for wear and other abnormal conditions and replace the parts as necessary.

1) Installation of the front and rear bearing inner races necessitates the use of the special tool (09913–80111) as shown in the Fig. 4–4.
2) Reassembly of the front and rear bearing outer races into the differential carrier necessitates the use of the special tools respectively as shown in the Fig. 4–5. (For front bearing-09913–76010, for rear bearing-09913–85210). When re-assembling the outer race into the differential carrier, exercise care to avoid inclination of the outer race in position, or bearing seizure, abnormal noise and abnormal wear will result.

(2) Differential side gear backlash adjustment

Adjust the differential side gear backlash with the side gear thrust washers so that the backlash becomes 0.1–0.2mm (0.004–0.008in) when the differential case R is installed and bolts tightened to 140–160kg-cm (10.1–11.6lb-ft) torque.

Differential side gear backlash	0.1~0.2mm (0.004~0.008in)
Differential side gear thrust washers	0.5~0.8mm (0.02~0.03in)
Differential case R tightening torque	140~160 kg-cm (10.1~11.6 lb-ft)

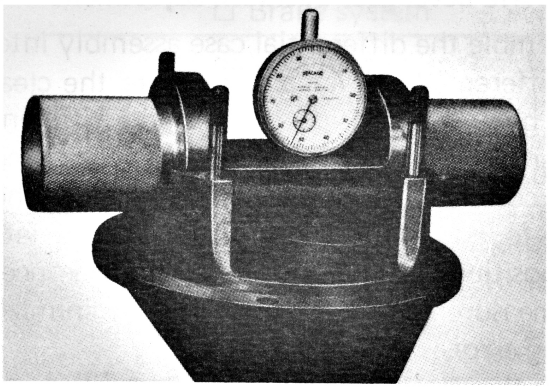


Fig. 4–7.

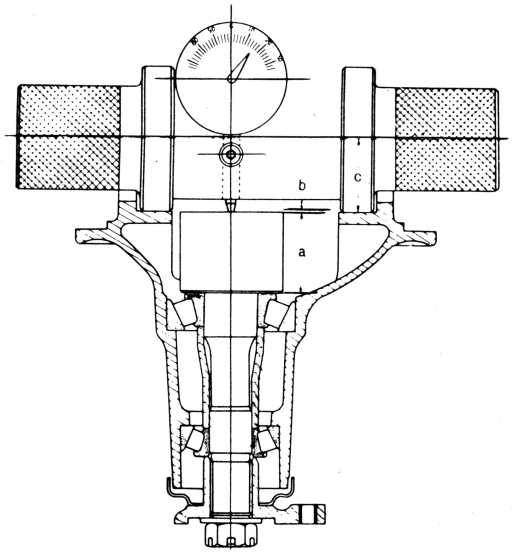


Fig. 4–8.

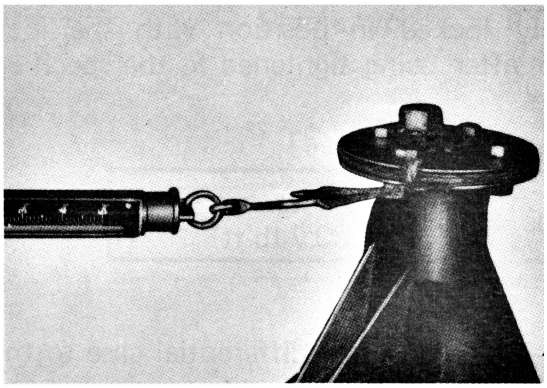


Fig. 4–9.

(3) Adjustment of mounting distance

1) Position the bevel pinion shim adjuster (special tool 09922–76010) on the surface plate and calibrate the dial indicator reading to zero.
2) Set the special tool in position as illustrated in the Fig. 4–8. Tighten the nut to the 50–70 kg–cm (3.6–5.1 ft–lb) torque.
3) Thickness of shims
   (a + b + c) – bevel gear stamped figure = thickness of shims
   a + c: special tool figure = 75.926 mm (2.9644 in)
   b: reading of dial gauge
   Accordingly
   75.926 (2.9644 in) + reading of dial gauge – bevel gear stamped figure = thickness of shims.
4) Adjusting shims are available in five (5) different thicknesses to permit fine adjustment. Carefully select the shims of the right thickness so that the mounting distance is closely adjusted to the value obtained through calculation of the measured data.

Drive bevel pinion shims	0.03, 0.05, 0.1 mm (0.001, 0.002, 0.004 in) 0.3, 0.5 mm (0.01, 0.02 in)

(4) Preload adjustment

Fit a shim of an adequate thickness (about 1mm (0.04in)) and adjusting collar to the drive pinion and then reassemble the front bearing inner race and drive joint yoke into position and tighten the drive bevel pinion nut to the standard torque.

Drive bevel pinion nut tightening torque	900~1,500 kg–cm (65.1~108.5 ft–lb)

Measure the starting torque by using a pull scale and special tool (09922–75220) as shown in the Fig. 4–9 and make necessary adjustment with the shims so that the starting torque is set within the specified range.
The preload adjust shims are in common to the drive bevel pinion adjust shims.

Starting torque	0.6~1.4 kg, (1.3~3.1 lb),	3.0~7.0 kg-cm (0.22~0.51 lb-ft)

* The starting torque should be measured without installing the drive bevel pinion oil seal in position and with the bearing lightly lubricated with gear oil.

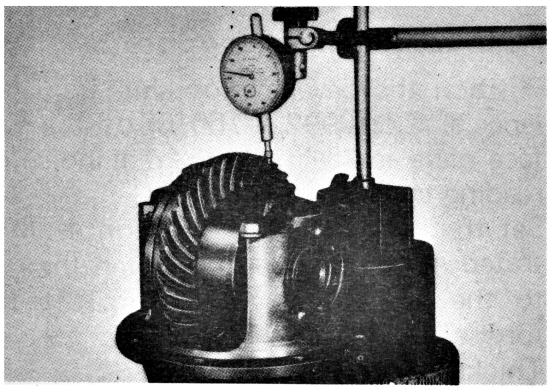


Fig. 4–10.

(5) Drive bevel gear backlash adjustment

Reassemble the differential case assembly into the differential carrier and measure the clearance between the side bearing and differential carrier using a feeler gauge. The measured value corresponds to total thickness of the shims to be inserted into the right and left side positions. When checking the clearance, take measurement at 2-3 portions to minimize reading error.

Divide the measured value into two (2) parts and install the shims equal in thickness to the value in both sides of the bearing to obtain correct backlash. To measure the backlash, proceed as follows: Set the dial indicator to the bevel gear at right angle to the gear tooth as shown in Fig. 4–10 and turn the bevel gear while holding the drive bevel pinion.

Drive bevel gear backlash	0.03~0.10mm (0.001~0.004in)
Differential side bearing adjust shims	0.1, 0.15, 0.3, 0.5mm (0.004, 0.006, 0.01, 0.02in)

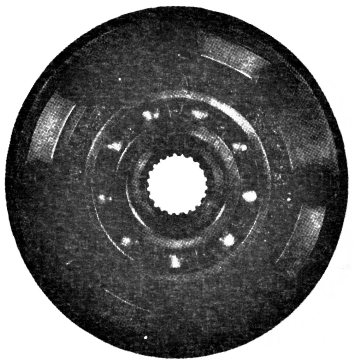


Fig. 4–11.

(6) Drive bevel gear bolts

The drive bevel gear bolts fastening the drive bevel gear to the differential case L are subject to the drive torque and therefore, are built with chromium steel to provide sufficient physical strength.

These bolts should not be interchanged with other bolts. These bolts should also be securely locked in position with the lock washer after being tightened to the specified torques.

Drive bevel gear bolt tightening torque	450~550 kg–cm (32.5~39.7 lb-ft)

(7) Differential gear oil

0.8 ltr of gear oil is required to fill each of the front and rear differential case to the specified level.

Differential gear oil capacity	SAE #90 0.8 ℓ (0.85/0.70 qt, US/Imp)

CHAPTER 5. FRONT WHEEL DRIVE SYSTEM

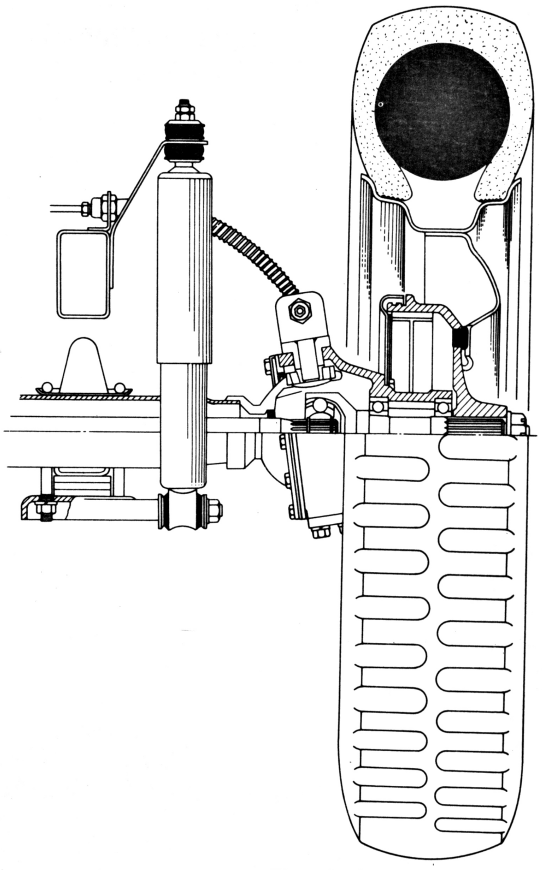


Fig. 5–1.

5–1. General description

As the Suzuki LJ10 is a four-wheel drive vehicle, the front wheels are not only made to steer the vehicle but also to carry traction power to the ground. Accordingly, the front axle shafts with the conventional cross-shaft universal joint will fail to carry the drive torque to the wheels smoothly. For this reason, the front axle shafts are fitted with a Bir-field constant velocity joint which is adaptable to greater angular variations and gives longer service life.
The steering knuckle encases the joint to provide maximum protection against dirt, grit and other foreign matters. The end of each knuckle is sealed with the oil seal and felt gasket.
The steering knuckle and front axle housing are connected with the king pins of the conventional design and the taper roller bearings.

5–2. Disassembly procedure

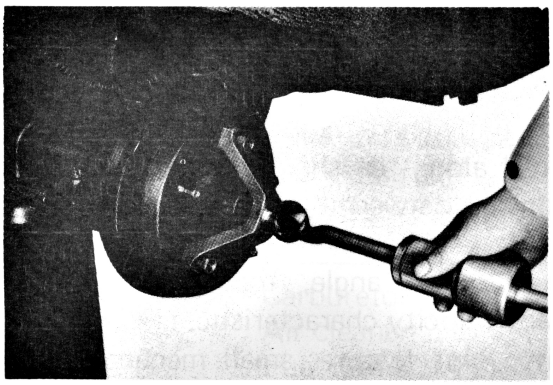


Fig. 5–2.

1) Turn loose the wheel nuts and jack up the front end of the vehicle and remove the wheel.
2) Disconnect the brake pipe and tie-rod end. The tie-rod end can be removed by tapping the knuckle arm with a copper hammer.
3) Take out the cotter pin from the front hub nut and remove the hub nut and then pull out the brake drum with the aid of the special tool-wheel hub puller-09943–35511 as shown in the Fig. 5–2 and sliding hammer.

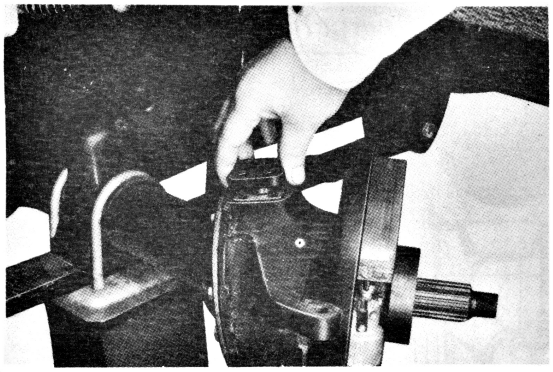


Fig. 5–3.

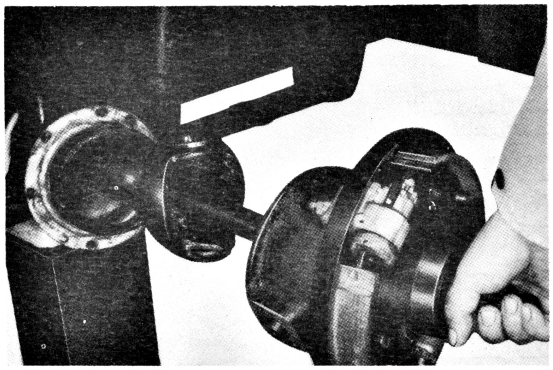


Fig. 5–4.

4) Take out the eight (8) 6mm joint seal bolts and remove the oil seal cover, felt gasket and oil seal carefully.
5) Take out the four (4) king pin bolts and remove the upper and lower king pins as shown in the Fig. 5–3. When removing the king pins, note the thickness and number of adjusting shims fitted behind the king pins.
6) Withdraw the front axle shaft together with the associated parts as shown in the Fig. 5–4.

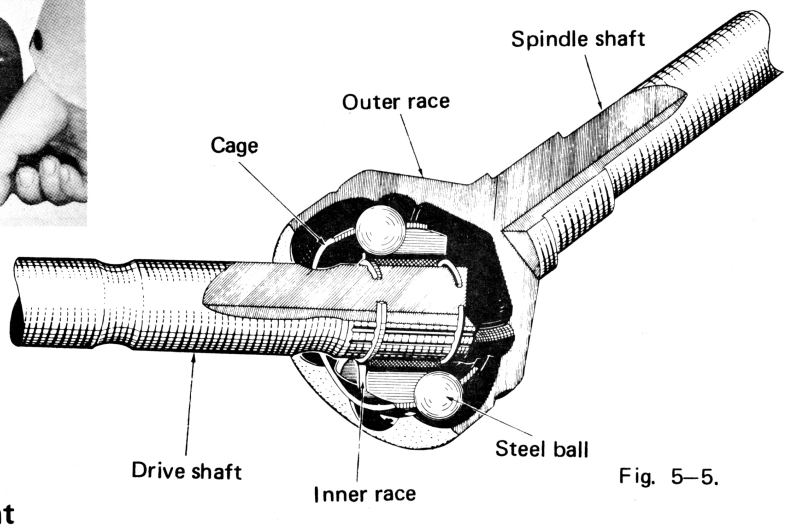


Fig. 5–5.

5–3. Inspection and adjustment

(1) Front axle shaft

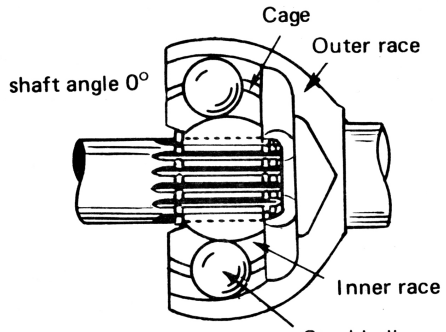


Fig. 5–6.

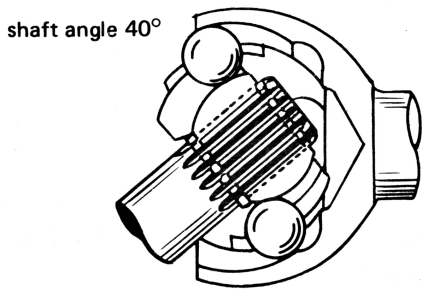


Fig. 5–7.

1) Construction and function

The joint consists principally of the outer race, inner race, cage and balls as illustrated in the Fig. 5–5. When the joint angle varies, the inner race moves just as the ball bearing, ensuring smooth transmission of the drive torque. When the joint rotates, the six (6) balls become locked in position, carrying the drive torque from the drive shaft, inner race and balls to the outer race.

The advantage of the constant velocity joint is such that when the joint angle varies, the balls roll along the shaft, due to geometrical relationship between the inner race and outer race, in the distance corresponding to a half of the varying angle, thereby maintaining constant velocity characteristic. The constant velocity joint features small mechanical loss and excellent durability.

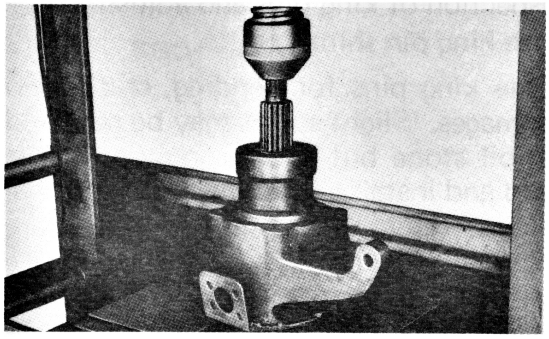


Fig. 5–8.

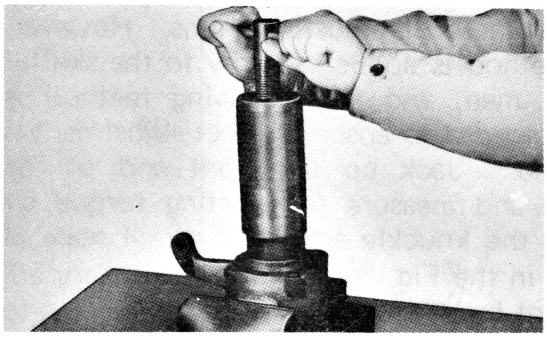


Fig. 5–9.

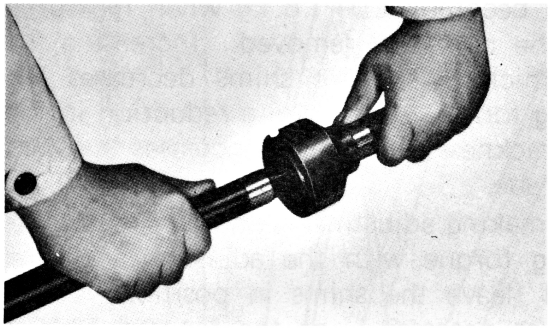


Fig. 5–10.

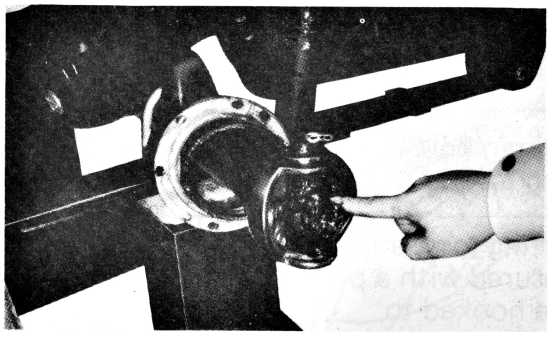


Fig. 5–11.

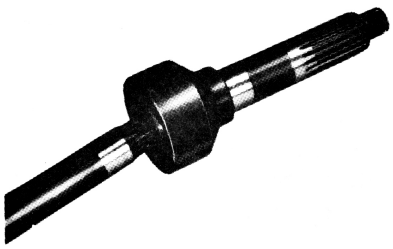


Fig. 5–12.

2) Disassembly and reassembly of front axle shafts

The front axle shaft can be removed in the manner as shown in the Fig. 5–8 using a press machine. To install, pull the front axle shaft inward using a special tool-rear shaft puller-09922–55210 as shown in the Fig. 5–9. When installing the front axle shaft the use of the special tool is essential-for if the shaft is driven into position with a hammer, the Bir-field constant velocity joint will be shock-loaded causing troubles.

3) Inspection of front axle shafts

When inspecting the Bir-field constant velocity joint, check the front axle shaft for end play as shown in the Fig. 5–10. Turn the shaft and check to be sure it rotates smoothly without binding. Do not spin the joint by holding the front axle shaft.

	Standard	Service limit
Front axle shaft end play	0mm	1.5mm (0.06in)

4) Lubrication of front axle shafts

Make sure to lubricate the front axle shaft only with sulphuric molybdenum grease. This is a special-purpose lubricant and use of grease of other kinds for lubricating the front axle shafts will result in considerable reduction in the service life of the vital parts. Fill about thirty (30) percent of the space within the knuckle case with sulphuric molybdenum grease as shown in the Fig. 5–11.

5) Inspection of front axle shaft splines

Check the splines for bending, cracks, corrosion and other abnormal conditions. To check for rotational play, jack up the front end of the vehicle with the wheels in position and move the wheels back and forth carefully and hand-feel the play.

	Standard	Service limit
Rotational play in drive shaft splines	0mm	0.5mm (0.02in)

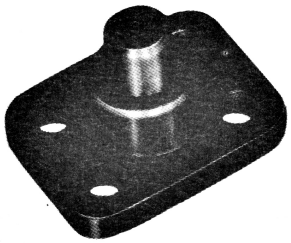


Fig. 5–13.

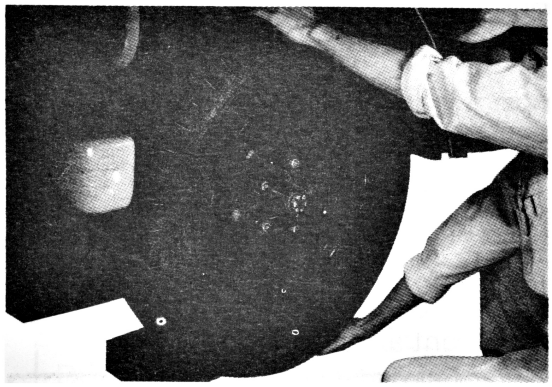


Fig. 5–14.

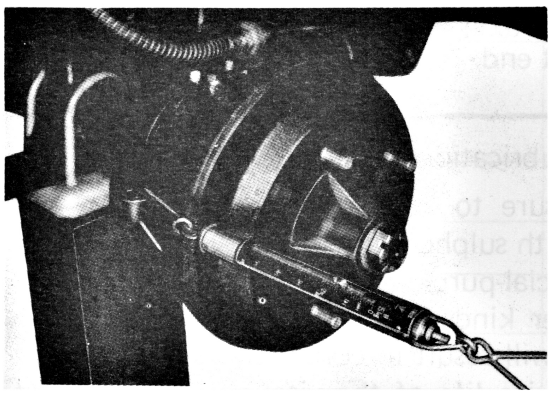


Fig. 5–15.

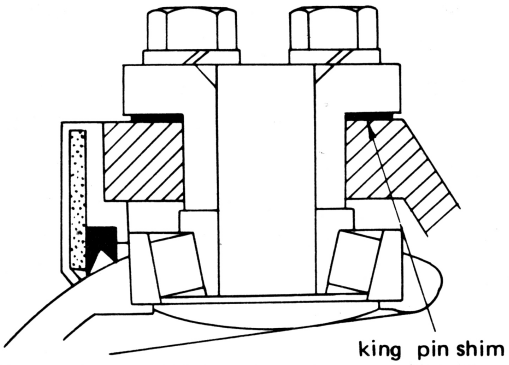


Fig. 5–16.

6) Inspection of king pins and adjustment with king pin shims

Check the king pins for bending, cracks and other damages. Slight scores may be removed with an oil stone but it is strongly advisable to discard and install new one if any abnormal condition is noted.

To check for king pin play, tighten the king pin bolts to the standard torques and move the wheel in and out as shown in the Fig. 5–14. King pin play can be removed by reducing the thickness of adjusting shims. However, this method is applicable only to the skillful service men, and the following method is recommended to ensure correct adjustment is obtained: Jack up the front end of the vehicle and measure the starting torque by pulling the knuckle arm with a pull scale as shown in the Fig. 5–15. Make necessary adjustment by adding or removing the shims to or from the king pins so that the starting torque becomes 1.0–1.8 kg when measured with the dust seal removed. Increasing the total thickness of the shims decreases the starting torque. Similarly, a reduction in the total thickness of the shims increases the starting torque.

When making adjustment, do not measure the starting torque with the adjusting shims removed (leave the shims in position and remove as necessary), or the tapered bearing will be stressed and be injured. The adjusting shims are available in two (2) different thickness: 0.1mm and 0.5mm.

King pin bolt tightening torque	200~300 kg-cm (14.5~21.7 ft-lb)
Starting torque (When measured with a pull scale hooked to knuckle arm)	(with dust seal removed) 1.0~1.8kg (2.2~4.0 lb)
King pin shims (thickness)	0.1mm, 0.5mm (0.004, 0.02in)

If correct adjustment can not be obtained even with all the shims removed (if king pin play still exists with all the shims removed), it is an indication that the taper roller bearing and king pin are worn out and must be replaced as a set.

CHAPTER 6. STEERING SYSTEM

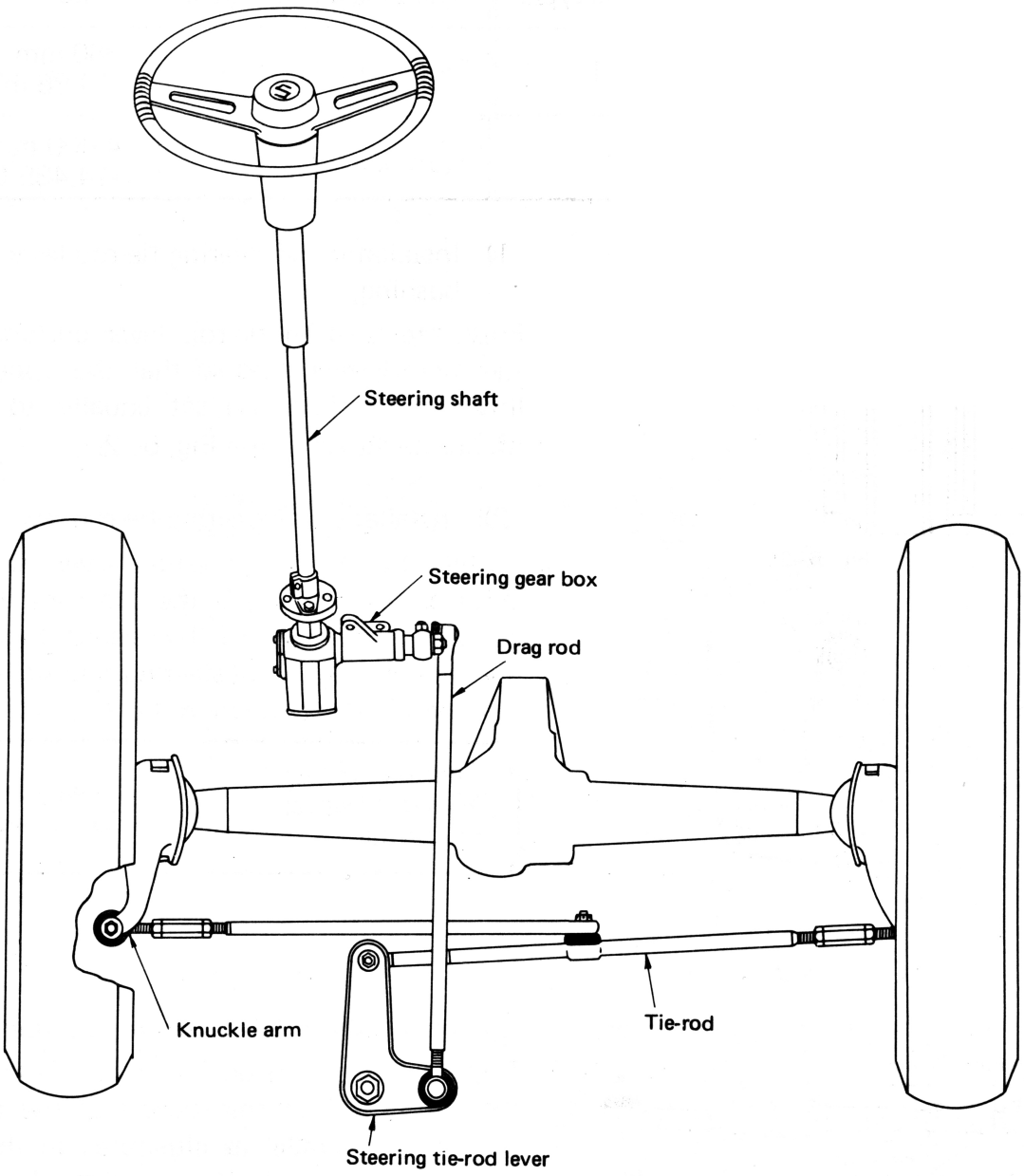


Fig. 6–1.

6–1. General description

The steering system consists of the steering wheel, steering gear box, pitman arm, drag rod, steering tie-rod lever, tie-rod, knuckle arm, etc. The steering system adopts the ball-screw type steering gear which requires less steering effort, provides an excellent durability and smooth self-returning action.

The steering tie-rod lever is owing to its arrangement positioned on the left side end. The drag rod, steering tie-rod lever and tie-rod are linked with a ball joint which has a high resistance to wear. The steering system service procedures are omitted as they are equal to the model L40 service procedures and only important points are described below.

(Specifications)

Gear type	Ball-screw type	Steering angle (outer)	28°
Gear ratio	15.4 : 1	Steering wheel diameter	380 mm (14.96 in)
Steering angle (inner)	33°	Turning radius	4,400 mm (14.435 ft)

6–2. Inspection and servicing

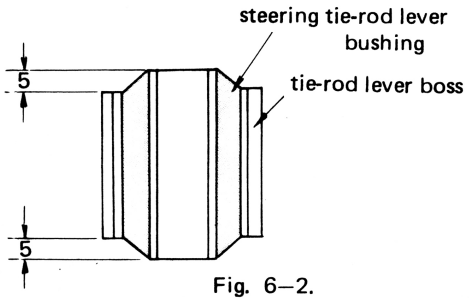
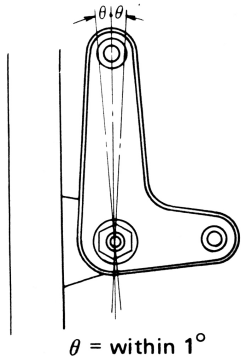


Fig. 6–2.



θ = within 1°

Fig. 6–3.

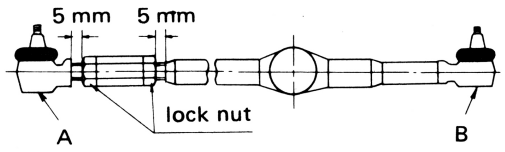


Fig. 6–4.

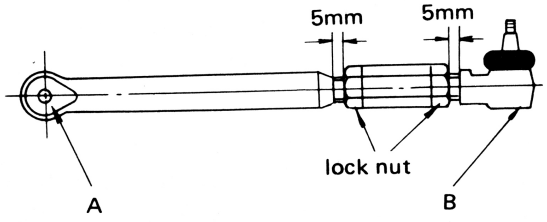


Fig. 6–5.

1) Installation of steering tie-rod lever bushing

Press the steering tie-rod lever bushing into the tie-rod lever boss so that the upper and lower projections are set equally to 5mm (0.2in) as shown in the Fig. 6–2.

2) Installation of steering tie-rod lever

Install the steering tie-rod lever so that misalignment between the straight line in line with the center of the chassis frame and the center line of the steering tie-rod lever is held within 1° as shown in the Fig. 6–3.

Steering tie-rod lever nut tightening torque	500~900 kg–cm (36.2~65.1 ft–lb)

3) Installation of left side tie-rod assembly

Tighten the tie-rod end lock nut so that the faces A and B of the sockets at the tie-rod ends are in parallel as illustrated in the Fig. 6–4. When securely tightened, the lock nuts should be well centered leaving the threaded portion of 5mm (0.2in) at each side.

4) Installation of right side tie-rod assembly

Tighten the tie-rod end lock nut so that the faces A and B of the sockets at the tie-rod ends are in perpendicular as illustrated in the Fig. 6–5. When securely tightened, the lock nuts should be well centered leaving the threaded portion of 5mm (0.2in) at each side.

6–3. Front wheel alignment

Only the toe-in is adjustable and camber and caster can not be adjusted as they are so designed and built into the vehicle.

The following points should be checked before inspecting the front wheel alignment.

1) Check to be sure the vehicle is parked on a level ground.
2) Check to be sure the vehicle is not loaded.
3) Check and adjust tire pressure.
   Front and rear tires: 1.1 kg/cm² (15.6 lb/in²)
4) Check tread on tires for a sign of abnormal wear.
5) Check to see if the body is inclined.
   Failure to check the above points will result in poor adjustment of front wheel alignment.

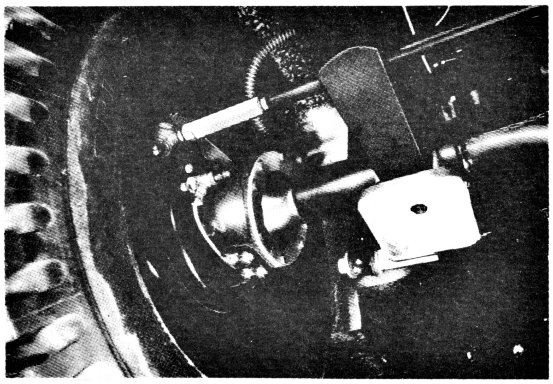


Fig. 6–6.

1) Measurement and adjustment of toe-in

Check the toe-in with a toe-in gauge and if the measurement deviates from the standard value (2–6mm), make necessary adjustment by turning the right and left side tie-rods.

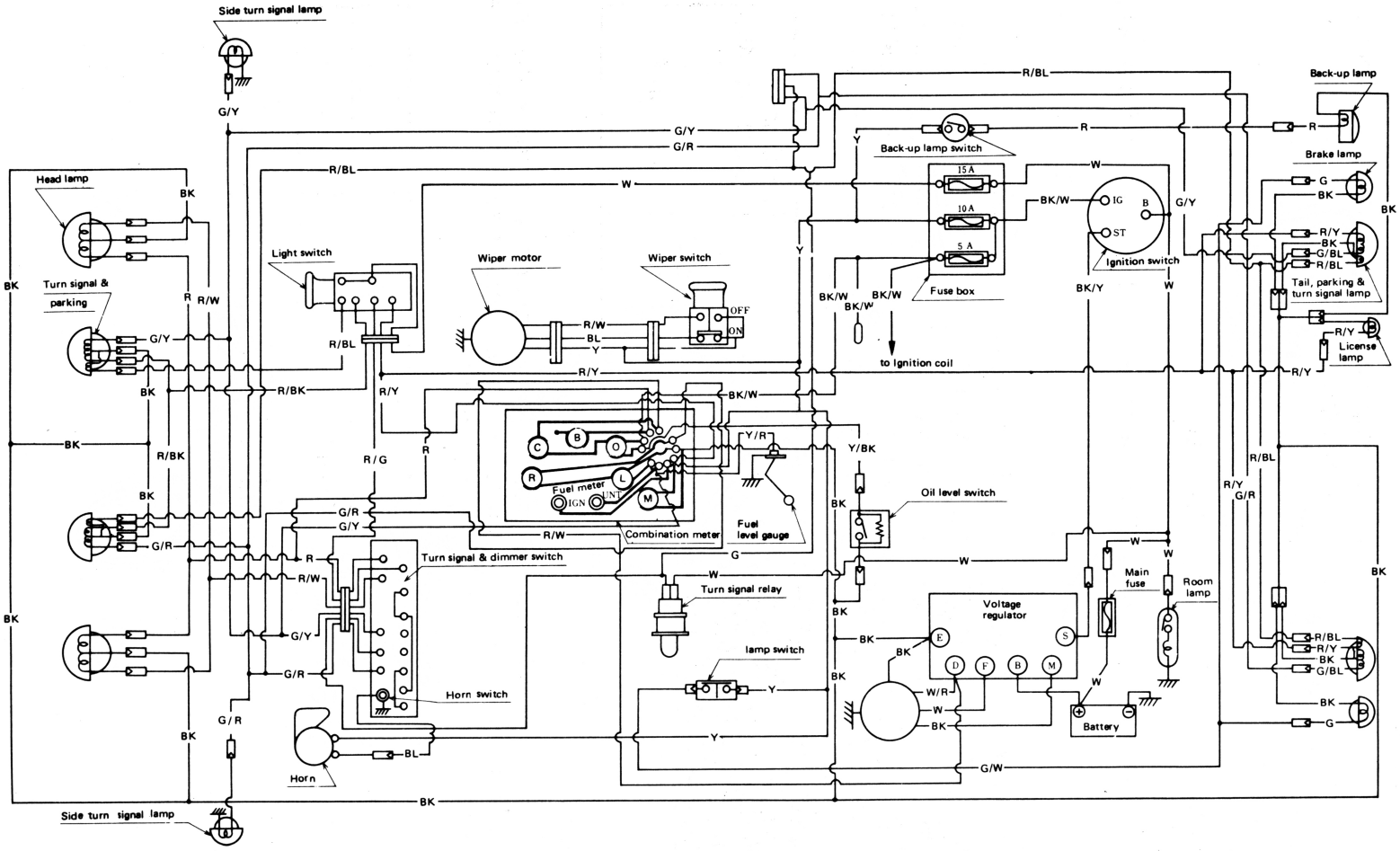
Toe-in	2~6mm (0.079~0.24in)
Side slip: (when tested with driver seated in position)	in 2~in 4

2) Camber and caster

The camber and caster are not adjustable. However, it is important to check the front axle housing for bending, spring seats for damage and front springs for permanent yield as these have a close bearing on the front wheel alignment.

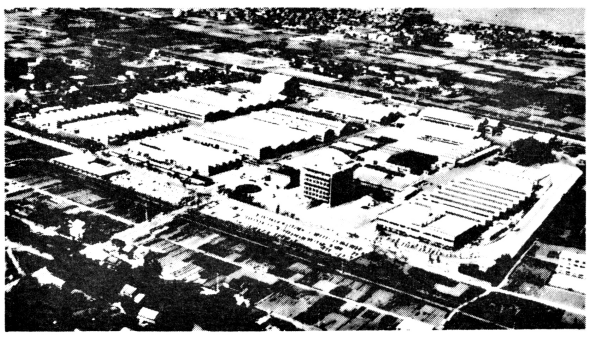
Camber	1°
Caster	4°
King pin inclination	9°

SUZUKI LJ10 WIRING DIAGRAM



Head lamp	12V 50W/40W	C ..... Charge lamp	G ..... Green	R/G ..... Red with green tracer
Parking tail & turn signal lamp	12V 8, 3.4W/23W	B ..... High beam indicator lamp	R ..... Red	R/W ..... Red with white tracer
Brake lamp	12V 23W	O ..... Oil level lamp	W ..... White	R/Y ..... Red with yellow tracer
License lamp	12V 10W	R ..... Right turn signal indicator lamp	Y ..... Yellow	W/R ..... White with red tracer
Combination meter lamp	12V 3.4W x 4	L ..... Left turn signal indicator lamp	BK..... Black	Y/R ..... Yellow with red tracer
Room lamp	12V 5W	M ..... Combination meter lamp	BL..... Blue	G/BL ..... Green with Blue tracer
Main fuse	20A		G/R .. Green with red tracer	R/BK ..... Red with black tracer
Fuse in fuse box	15A, 10A, 5A		G/W .. Green with white tracer	R/BL ..... Red with blue tracer
Back-up lamp	12V 10W		G/Y .. Green with yellow tracer	Y/BK ..... Yellow with black tracer
Side turn signal lamp	12V 6W			BK/W ..... Black with white tracer
				BK/Y ..... Black with yellow tracer





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